

# What Makes It A Bosendorfer?

### The Tradition

The motto of the house of Bosendorfer: "To give the artists and music lovers of the world an instrument which fulfills their highest expectations."

The goal of the Bosendorfer Klavierfabrik: "To build the world's finest piano".

### **Bosendorfer and Vienna**

From the 17<sup>th</sup> to the 20<sup>th</sup> century, Vienna has been the center of music for "the world. The world's greatest composers lived in Vienna – Mozart, Haydn, Beethoven, Brahms, Liszt, Johann Strauss, Richard Strauss, Schubert, Wolf, Bartok, Schoenberg, Berg and many more. The House of Bosendorfer has always sought an active dialogue with the city's great composers and performers in an effort to constantly improve the Bosendorfer instruments.

### The World's Slowest Piano Builders

Since the first Bosendorfer piano was built in 1829, fewer than 50,000 have been made. This makes an average of only less than 300 pianos per year since the inception of the company. Today, the factory makes about 400 grand pianos per year with about 150 employees. This compares to an estimated production of 2,500 for New York Steinway with about 370 workers (NY Times, April 7, 1991). This means that each Bosendorfer employee builds fewer than 3 pianos per year, while each Steinway employee builds over twice that many.

The opus number on a Bosendorfer piano is the actual sequenced number of the piano going back to 1828. This number is never called the "serial number".

A Bosendorfer piano is about 62 weeks in production. If the time spent in the aging of the wood and plate were included, however, the time to make a Bosendorfer grand is about 5 years.

Fewer than 300 Bosendorfer pianos are brought into the United States each year.

The tradition of old-world hand-craftsmanship is central to the Bosendorfer philosophy. It is a trademark of the Bosendorfer factory which is famous throughout the world. In general, hand-craftsmanship requires extreme attention to detail and the maximum possible quality control.

In addition of a unique opus number, each Bosendorfer piano has a unique "work number" which may be found on most of the instruments parts from the beginning of construction. Each piano made in this way is different: each has an individual character or "soul".

Bosendorfer craftsmen are trained through a lengthy and rigorous apprenticeship program. At least 12 years are required for a technician to advance from the position of apprentice to journeyman, then to craftsman, and finally, to the position of blue-coated foreman. This process of education combines extensive theoretical training and factory experience in all phases of piano construction.

### The Tone of a Bosendorfer

Ultimately, the most important feature of a piano is its tone. The marvelous sound of the Bosendorfer piano is, in general, characterized by a tone which is rich, singing and sustaining. The design, scaling, and all elements of construction are focused on achieving these features in the final sound of the instrument. A frequent observation about the remarkable sustaining quality of the Bosendorfer is, "It sings forever!"

#### Famous Phrases associated with Bosendorfer

- The tone that sings forever
- You are at liberty to choose between the good and the very best
- The world's slowest piano builders
- To own a Bosendorfer is to own a real piece of Viennese Culture
- Exclusivity is not only a matter of money (One cannot buy good taste.)

#### **Solid Wood Construction**

Bosendorfer is the only piano maker to construct the piano case of solid wood. Bosendorfer uses solid soundboard-quality Bavarian spruce. All other piano makers use stressed plywood, using the so-called "rim-press" method.

Bosendorfer makes the inner rim of solid spruce blocks, using a technique similar to that used by a brick layer building a brick wall. The outer rim is made of soundboard quality solid spruce shaped by cutting narrow kerfs. After the outer rim is properly shaped and the final inner and outer veneers are completed, the small slots remaining are filled with spruce shims. The outer rim of Bosendorfer is therefore thinner than most other pianos.

Both the inner and outer rims of a Bosendorfer interface directly with the soundboard so that the entire case becomes an extension of the soundboard. Since the soundboard is the "amplifier" of the strings, this is an obvious advantage. The Bosendorfer piano is, for this reason, frequently categorized as a stringed instrument, where all other pianos are categorized as percussion instruments. It is the worlds only piano which may be categorized this way.

This feature also affords Bosendorfer the unique and beautiful case design of the three larger grand models, featuring the three extra "corners" not found on any other piano.

### The Extended Keyboard

Two models of Bosendorfer pianos have added notes in the bass. The 225 has four added notes while the while the Model 290 has nine added notes. These notes contribute to the richness of the pianos' sound, even when they are not being played. The additional low strings product sympathetic vibrations that enrich the overall sound of the instrument.

The four main advantages of the extended keyboard are:

- The presence of the strings brings extra resonance to the entire piano.
- 2. The soundboard is wider a than on an 88-note piano.
- More tenor and bass notes have bridge placement closer to the center of the soundboard.
- 4. Music literature written for these notes can be performed as intended by the composer (see addendum).

The low C on the Bosendorfer Imperial was created at the request of Busoni who wished to reproduce the 32-foot organ pipe. Busoni when on to create his famous piano-transcriptions of the Bach organ repertoire, frequently using the low Bosendorfer notes. The added depth and richness of the sound throughout the entire piano motivated Bosendorfer to adopt the new design.

# **All Spruce Construction**

In addition to the soundboard and the case, many other parts of a Bosendorfer are also made of spruce including:

- The keybed
- All trusswork
- The ribs
- The fallboard
- The keys

The extensive use of spruce also makes the Bosendorfer piano lighter and more resonant than other pianos. Fully 85% of the Bosendorfer piano is spruce, more than any other piano.

# **Tuning pin holes**

Bosendorfer drills the holes for the tuning pin in an open window pin panel design. Each is marked for exact locations and allows greater tuning stability.

### **Bridge Pins**

Bridge pins are made of nickel plated steel. The nicked plating reduces friction and eliminates corrosion and oxidation.

# **Naturally dried wood**

Bosendorfer is the only piano which relies primarily on naturally dried wood instead of kiln-dried wood. Kiln drying damages some of the pores of the wood and decreases its acoustic properties.

# Special Plate finishing

The Bosendorfer craftsmen take more care in the finishing of the plate than any other piano manufacturer. A Bosendorfer plate is aged in air for a period of several months to relieve tension created in the casting process.

At least 40 hours are spent in the treating and sanding of the surface of the plate. Six coats of finish are applied. The color of the plate is a trademark of Bosendorfer and its visual appearance in the reflection of the lid is a matter of great pride to the craftsmen.

## **Tapered Key Touch Weight**

The weights of touch of Bosendorfer keys are tapered from 48 grams in the treble to 55 grams in the bass. This is the preference of the majority of concert artists. Of course these weights may be adjusted to the preference of each owner.

### **T-Nut Pin Block Mounts**

Bosendorfer grand pianos utilize a special method for fastening the pinblock to the cast iron plate. The Bosendorfer T nut is a metal to metal fastener consisting of a machine screw and a specialized nut which is countersunk into the bottom of the pinblock. Other manufacturers use ordinary wood screws. The advantages of the Bosendorfer system are strength, stability and longevity.

### Capo d'astro Bar

Bosendorfer is the only piano in the world which uses an independent capo d'astro bar, rather than one which is cast into the plate. This allows more acoustic separation from the plate, and thus less absorption of resonance. This technique also facilitates ease of maintenance of this critical termination point.

# **Individual Stringing**

Bosendorfer uses individual stringing on the entire piano. This permits better tuning stability. Also, if a string breaks during a performance, only 1 of the 3 unisons is affected, and the music may continue because there will be two strings left.

## **Hand-Made String Loops**

This guarantees fewer tonal impurities

# **Bass Strings Hand Wound**

All Bosendorfer bass strings are hand wound with two layers of solid copper windings. This allows greater evenness of windings and better quality control over materials. It also creates even tension throughout the length of the strings with no twisting. Each bass string receives two clockwise turns so that the strings tension will be fully relieved during tuning.

## **Low Mass Bass Bridge**

Bosendorfer bass bridges have a unique design with holes similar to those on a violin bridge. This design reduces the mass and makes the bridge more sensitive with greater speed of vibration transmission.

Great care is devoted to the treble and bass bridge construction. The bridges hand-notched and the bridge pins are positioned so that the strings are completely free exactly at the point where they pass the pins.

## **All Brass Components**

All the features on the piano which look like brass actually are brass. There is no brass plating on the piano. The casters, pedals and even the nameplates on the fallboard and on the sides of the pianos are solid brass.

### **Renner Action To Bosendorfer Specifications**

Some features of the Bosendorfer custom action design are:

- Gravity actuated damper under-levers for smooth transition, no springs.
- Easily adjustable spoons in under levers
- Action parts made of hornbeam, a very dense material preferred over maple.
- New Herz design has faster repetition
- o Full sostenuto, not mounted on action and therefore accurately serviced.

## **Highest quality materials**

Only the finest and most costly woods are used...spruce, maple and beech

#### **Soundboard Materials**

Only the finest quarter-sawn Bavarian spruce is used. This wood is aged for three years.

### **Pin Block Materials**

Made of quarter/sawn hard-rock maple and delignit beech.

## **Polyester Finish**

The finish on the Bosendorfer piano is a special polyester which is very beautiful durable and expensive. It is the only type of finish which may be returned to its original beauty for many decades without re-finishing – simply by buffing. Bosendorfer was the originator of this type of finish about 21 years ago. Today, most high quality piano manufacturers have adopted it world-wide.

## **Keybed Reinforcements for Glide Bolts**

There are several small beech disks inserted into the keybed on each Bosendorfer grand piano. These protect the spruce keybed from wear caused by the glide bolds on the action frame.

### Highest quality hammer felt

Bosendorfer has the choice of the highest grades of felt produced by the Renner Company in Stuttgart, Germany. After the best felt is set aside for Bosendorfer, the Bosendorfer specialists have the option to accept or reject each set. The Bosendorfer inspectors have been known to reject as much as 50% of the felt before any of it is made into hammers. Both rejected felt and rejected hammers are sent back to Renner.

### 10-year warranty

Bosendorfer is the only world class piano to offer a full 10-year warranty on parts and labor. The warranty offered by the other companies (Hamburg Steinway and Bechstein) is only 5 years.

# Compositions Intended for Bosendorfer Extended Keyboard

Bela Bartok

Piano Concerto No. 2 Piano Concerto No. 3

Ferruccio Busoni

Multiple original compositions Multiple JS Bach transcriptions

Claude Debussy

La Cathedrale Engloutie

Ernst von Dohanyi

Piano Concerto (1889 for the occasion of the first Bosendorfer Competition)

**Edward MacDowell** 

Eroica Sonata

Frank Martin

Piano Concerto No. 2

Modest Mussorgsky

Pictures At An Exhibition: The Great Gate of Kiev

Maurice Ravel

Jeux d'Eau

Miroirs

Gaspard de la nuit – Scarbo

Roger Sessions

Piano Sonata #2

Ralph Vaughan Williams

**Various Compositions** 

Richard Wagner

Parzifal, Bells of the Gral

6/20/05