

### Petrof, spol. s r.o., Na Brně 1955, 500 06 Hradec Králové 6, Czech Republic confirm that Grand piano, Model Petrof P 284 Mistral has these characteristics:

# 1 Advantages of the construction and materials used

# in the grand piano PETROF 284 Mistral



Colour: black high polish Width - 1580 mm | 5'2" Length - 2840 mm | 9'4" Height - 1025 mm | 40 3/8" Weight - 576 kg | 1270 lb

## 2 <u>Rim</u>

The rim is a Petrof original design. The inner rim is laminated with 12 ply's of solid beech and birch lamels and is CNC machined for high accuracy. The outer rim is laminated from birch plywood sheets.

The inside facing is veneered horizontally with Ebony Makassar veneer. The total rim thickness is 8.4 cm. A very strong rim ensures long term tuning stability and regulation stability. A strong CNC machined rim supports the proper crown of the sound board, which produces the precious Petrof tone. Rare maple wood on the inner face of the rim give the noble appearance that is deserving of a Petrof grand piano.

### 3 Frame posts

The Petrof frame consists of five longitudinal spruce posts, along with two cross spruce posts.

The joints of the posts and rim are dove tailed (fish tailed) and doweled with beech hardwood dowels.

The cross block of wooden frame is reinforced by profiled steel rail.

The entire wooden frame is CNC machined to insure an accurate fit to support the crown of the sound board. A total of seven frame posts and a reinforcing of cross block by steel rail ensure its extraordinary form stability.





#### 4 Legs

The legs are a Petrof original design.

The legs are made with a solid beech core, an outer layer of alder, a Gabon counter veneer, and a decorative veneer. The legs are 625 mm in length.

Strong leg construction ensures high piano stability when being played dynamically.

#### 5 Iron plate

The iron plate is produced in the Czech Republic.

The iron plate is made from grey cast iron, wet sand casted, and hand finished; then it is CNC machined for an accurate fit. Each plate is finished in the new dynamic gold color.

CNC machining ensures high accuracy of string scaling and accurate fit to each piano. Our new plate color enhances the beauty and noble look of the Petrof grand piano.

### 6 Iron plate support

An adjustable steel bolt is added between iron plate and cross block of wooden frame to increase stability. New design of the adjustable bolt aids in the stability.

Support of iron plate increases the stability of its form, resulting in better tuning stability.

## 7 Hardware fittings

The hardware is a Petrof original design. The hardware is solid polished brass, lacquered, and stain resistant. All the hardware fittings are maintenance free.

#### 8 Pin block

The pin block is made from special Multiplex type compressed beech plywood with a density 800 –850 kg/m3, laminated using very strong moisture resistant laminate glues. Pink block consists from 22 levels. The pin block is highly resistant to climatic changes, providing stable torque of tuning pins and high tuning stability.

#### 9 Soundboard

The soundboard is a Petrof original design. The soundboard is made from fine European spruce. It is asymmetrically crowned, and diaphragmatic tapered from 9 mm under the bridge to 7 mm along its perimeter. It has a new shaped descant arc producing more clarity of tone in the last octaves. Soundboard square in m2 /square meters/: Vibrant part of sound board 2,830 m2

The asymmetric crown and diaphragmatic tapering of the soundboard gives the piano greater acoustic output in the whole tonal range, allowing it to fill even the largest of concert halls with sound.

#### 10 <u>Ribs</u>

The ribs are a Petrof original design. The ribs are made from fine European spruce.

They are individually asymmetrically shaped the tips are hand fitted to insure a proper fit. The corner cross rib (cut off bar) is laminated from beech lamellas and CNC machined to form the arc.

Individually asymmetrically shaped ribs support the asymmetric crown of the soundboard. Proper soundboard crown gives birth to the Petrof sound. Arced cross rib creates good conditions for vibrations of the soundboard.

#### 11 Bridges

The bridges are a Petrof original design. The treble bridge is made of solid maple wood. The bass bridge is made of solid maple wood. In the bass bridge horizontal holes are used to lighten its mass and the bottom is cut for better



elasticity. All the bridge caps are graphite coated, notched and drilled for pins by hand.

The different materials in the bridge caps are used to most efficiently transfer the desired frequencies in each section to the soundboard. The lightened and elastic bass bridge enables exceptional transference of low frequencies to the soundboard all contributing to the wonderful European sound of the Petrof.

### 12 Scale

The Mistral uses agraffs in the bass and low treble and front and rear pre-tuned duplexes in high treble. Petrof utilizes laser positioning of its duplex bridges (frets).

The Mistral uses single string hitching throughout the piano.

Using of agraffs and duplex scaling adds richness to the tonal color of the piano.

### 13 Tuning pins

The tuning pins are made of steel then nickel plated for prolonged service life. The tuning pins are of the best quality and they are corrosion resistant.

### 14 Strings

The steel wire for treble strings and steel core of wrapped strings are made by Röslau Germany. The copper wire for winding is made by Degen Germany. The longest bass string is 2080 mm. Strings are made from special string wire of top world quality.

### 15 Hammer heads

The Petrof utilizes Renner hammers made in Germany with hornbeam moldings, premium felt, and hornbeam hammer shanks. Renner hammers are one from the worlds best, made from very special hammer felt. These hammers enable Petrof to obtain a wide scale of tonal color and power.

## 16 Dampers

Petrof dampers are supplied by Renner of Germany.

In this grand piano dampers are used which are produced by Renner in Germany. These dampers are considered to be one of the best if not the best in the world.

## 17 Action

The action used in this piano is genuine Renner made in Germany with the double-repetition.. The wippen rail is made of vertically oriented Multiplex plywood. The hammer rail is made of solid beech wood. The action parts are made from hornbeam.

A Renner grand action is generally rated as one of the worlds best. It's fast and reliable, it is the most sought after by top quality pianists world wide.

### 18 Keyboard

The Mistral keyboard is another Petrof original design. Petrof keyboards are made from solid European spruce. White key tops area acrylic Polyplex from Sweden. Black keys are genuine Ebony wood.

The entire keyboard is individually balanced. Size of the keyboard: 7 whole and 1/3 octaves

The depth of the touch of the key: 10 mm The weight of the touch of the key: 55 - 51 g.

Petrof keyboards belong among the top quality keyboards in the world. Ebony wood provides an unmistakable feeling when playing.



### 18 Key bed

The key bed is a Petrof original design. Petrof construction, spruce sandwiched, between beech hardwood veneers. A beech hardwood insert is inset in the spruce core in legs and lyre area. The key bed thickness is 47 mm. The key bed is additionally reinforced by a strong solid wood rail on the bottom of the key bed.

Key bed is CNC machined for a perfect fit and high accuracy. A reinforced key bed ensures high stability both in play and regulation, it provides a feeling of reliance allowing the planists to perform to their full potential.

### 19 Pedals

The Mistral has three fully functional pedals made of solid polished brass.

The middle pedal has sustenuto function. The number of the pedals: 3

The pedal system is braced with two steel attached braces to insure stability when playing

Construction, materials and function of the pedal system are fully comparable with that of other high-end grand pianos.

#### 20 Tropicalisation

All currently produced Petrof grand pianos are tropicalized. That means all the wooden piano parts except the action are coated with varnishes that are resistant against infusion of air humidity. Outer polished surfaces are coated with polyester lacquers, other surfaces with polyurethanic or acrylic coatings. There are no open surfaces on the pianos that would enable absorption of air humidity. The Petrof Company steadily takes great care of instruments to insure humidity resistance, continually searching for more effective coatings to protect wood more efficiently.

# 21. The ISO International Quality Certificate

Guarantee form the factory: 5 years on a defect - crash in iron frame and soundboard. Next defects will be solved individually. Shipping country: Czech Republic, PETROF, spol. s r.o., Hradec Králové

Eva Hořínková Sales manager PETROF spol. s r.o. Na Brně 1955 500 06 Hradec Králové Czech republic

Tel. +420 4957 12 409 e-mail : <u>horinkova@petrof.com</u> <u>www.petrof.com</u>

