



**HANG**

Hangbauhaus, January, 2008.

PANArt Hangbau AG  
Engelhaldestr.131  
3012 Bern  
Switzerland  
Fax +41 31 301 33 32

© All rights reserved for both word and image.  
The terms PANArt and Hang are registered trade marks, and the property of  
PANArt Hangbau AG.



**A human being is most human when he or she is playing.** (after Friedrich Schiller)

Humanity possesses an enormous cultural treasure: the countless musical instruments of its many different cultures. The music that comes out of them comforts and gladdens the human soul.

The makers of musical instruments are committed to this tradition: they carry forward ancient knowledge and skills. They give their hearts' blood for good sound, and their concern is to refine the way the instrument is made. They always seek to accommodate the needs of people in their work, so that music does not abandon humanity, and her purpose can be fulfilled, which is to be a bridge to the spiritual realm.

One of the most recent acoustical instruments is the Trinidadian steel pan. It came to England in 1951 and later to central Europe, and it set us into vibration. We made steel pans for twenty years. In the endeavour to improve the pitch retention of this young instrument, we developed a new form of sheet steel.

We called it PANG-metal\*. Working with this high-energy material brought us closer to the essence of the sound of metal: it revealed to us both its chaotic and its harmonic aspects. We began to study other metal instruments and tried to understand their acoustics through reverse engineering. From this emerged the PANG instrumentarium, the traces of a journey which led us from the steel pan to the bell, thence to the gong, the gamelan, the cymbal and the drum, and finished with the hang, the unification of rhythm and melody. A new musical dimension was opening up. The hand ventured to the metal, and the sound gained in depth.

The hang has found a resonance in the souls of individuals all over the planet. It sings under the hands of modern pilgrims, on stages large and small, in religious ceremonies, in magical rituals, in therapy practices, in homes and schools. It adds a touch of colour to many styles of music, and, in quiet places, it speaks to the spiritual development of the individual.

This little booklet will offer some insight into the various phases of the hang's development, which has in no way concluded. Hang players are invited to freely investigate and contribute to the many-layered character of this instrument, so that it finds its place and its music. We, the hangmakers, will remain at the metal, continuing our research, attending to our powers, and listening to the echoes that return to us from around the world.

We would like to take this opportunity to thank all of those who have contributed, in word and in deed, to the development of this instrument.

Sabina Schärer      Felix Rohner

Hangmakers

\* PANG-metal: sheet steel enhanced with nitrogen.

## The Birth of a New Acoustic Musical Instrument

Around the turn of the millennium we received a visit from a percussionist who had left his steel pan with us in the workshop for tuning. He told us about his gathams\*, and on a subsequent visit he demonstrated them to us. The gatham, a clay instrument, shaped like a vase and played with the hands, attracted our attention. The percussionist played for us on his three differently tuned gathams simultaneously, and casually dropped the hint that he would love to get more sounds out of his instrument. His attempts to play the various resonating objects that were lying around the workshop – with his bare hands, rather than with mallets – gave us the impulse to pull a couple of PANG-metal shells out from under the workbench and into the daylight. One of these had seven notes already tuned into it. Put together, these two shells turned into a sounding ball! A new acoustic instrument was born.

The new instrument found an immediate resonance with musicians. Taken by surprise, we began to apply to its design all of the knowledge and experience with metal that we had gained through the years. Playing with the hands on sheet steel emerged as a new dimension of musical expression and challenged us: it demanded a correct harmonic tuning, equilibrium in complexity, and easy playability. Finding the correct thickness for the steel, the development of the necessary tools, the integration of the resonance of the inner space of the hang into the musical concept, as well as the attachment of the two shell forms – all this took time.

In the spring of 2001 we introduced the hang at the Frankfurt Music Fair.

\* Gatham, a South Indian hand percussion instrument.

\*\* Hang [han] signifies, in the dialect of Bern, *hand*.



## **The Hang: the Beginnings (2001–2005)**

The first instruments we made went primarily into the hands of percussionists. In the centre of the instrument we tuned a deep tone, which lay at the interval of a fourth below the lowest note of an eight-tone pentatonic series. We called the central note «ding», and the bass note, which sounds through the excitation of the entire resonating structure, we called «gu».

The colour of the instrument was that of tempered steel and the dome of the ding was polished to a mirror finish. The edges of the tone fields were marked, following the custom of steel pan fabrication. In the very centre of the inverted dome in the middle of each tone field there was, for technical reasons, a tiny metallic nipple. The price of the hang was between 200 and 300 €.

Better knowledge of the materials and a deeper understanding of the tuning process allowed us to take another step. Now we were able to tune scales with Bb3, C4, or C#4 as the fundamental. The ding acquired new warmth, when tuned to G3, F#3, or F3. The world of scales got much broader; we assembled a selection of 45 scales from diverse cultures, and others were customized according to the wishes of musicians. Thanks to new tools we were able to improve the stamping of the inverted domes in the tone fields, and to create tone fields without marking the circumference and without the nipple in the centre. Now the price was 460 €. Most of the hanghang\* from these early years were sold through music shops or a worldwide network of distributors.

Inside the instruments made during those years there is a sticker, featuring the name of the particular tuning, a serial number (1–4300) and the signature of the hangmaker: either F. Rohner or S. Schärer.



## **Low Hang (2005)**

With the introduction of the «low hang» we were able to address the needs of our clientele for deeper sounds. Deeper tones required larger tone fields, and larger tone fields required greater control of the inner tensions. Tempering the instrument a number of times in the kiln led to greater stability of the tone fields and to a more balanced curve of sound development. The low hang had seven or eight notes in its tone circle. In the low hang, the ding (tuned to F3, E3, or Eb3) was also the fundamental of the scale.

The price was now at 590 €.



## **Gudu Hang (2004–2007)**

In collaboration with an oriental percussionist we developed the «gudu hang». A second hole on the gu side opened up new ways of playing with the resonance of the air chamber. When a wooden piece, known as the «dum», was inserted into the gu, the chamber resonated a whole fifth lower. The second hole, known as the «du», could be closed with the help of a magnetic patch.



## **A New Generation (2006–2007)**

In the spring of 2006, after the customary winter research period, we were able to introduce a hang of an even more refined sound quality. The tone colour was improved by brushing brass into the ceramic-like outer surface of the metal. With the newly-developed protective shell, the hang now sold for 600 €.

The ding, now tuned to D3, activated the resonance chamber of the instrument at D2, when the instrument was played in the lap. The tone circle had seven or eight tone fields, with a range of notes from A3 to D5. A brass rim now protected the edge of the instrument.

Because some scales simply found more wholeness in the resonating body of the hang than others, the choice of models was reduced in the course of 2007. The neck of the gu was now tuned to D5, its whirring sound embedded in the sculpture. The sound of the entire vessel thus became richer. Through a new orientation of the tone fields the instrument gained in presence.

All instruments of this generation were sold at the Hangbauhaus. They are engraved with a serial number (001–0826) and the names of the hangmakers Schärer/Rohner.

With the new double protective shell, the price was now 880 €.



## **The Integral Hang (2008)**

*Its many-layered atmosphere has as its dark centre a D2, the resonant frequency of the vessel's chamber.*

*The ding, tuned to D3, is surrounded and supported by seven tone fields:  
A3, Bb3, C4, D4, E4, F4, A4.*

*These tone fields are zones of harmonic order.*

*The slightly oval shape of the integral hang fits comfortably in the lap.*

*With the lower notes close to the belly, the tone circle falls nicely under the hands.*

*The playing surface bears the colour of tempered steel.*

*The dome is brushed with brass and lacquered.*

*On the equator of the instrument the following information is engraved:*

*PANArt, Rohner, Schärer, date of fabrication, serial number (H1, H2, etc.).*

*With its new case made of natural fibre, the integral hang costs 1200 €(2008 price.)*



## Care

The hang can be cleaned off with a cloth, and when necessary with a little bit of alcohol. Oil can be used to protect the surface; a thin coating of «BIOFA Hartöl» can be applied. Played and treated in a reasonable way, the hang will maintain its tuning. It is made for the hands, so mallets are to be avoided. Salt water or salty air can be dangerous for the surface of the instrument. A bit of transient corrosion is not deadly, however, and can be rectified. In direct sunlight the hang can get overheated. The resulting damping of the sound will go away when the instrument cools off in the shade.

In the event a repair is needed, fax +41 31 301 33 32 or e-mail [hangrepair@gmx.ch](mailto:hangrepair@gmx.ch).

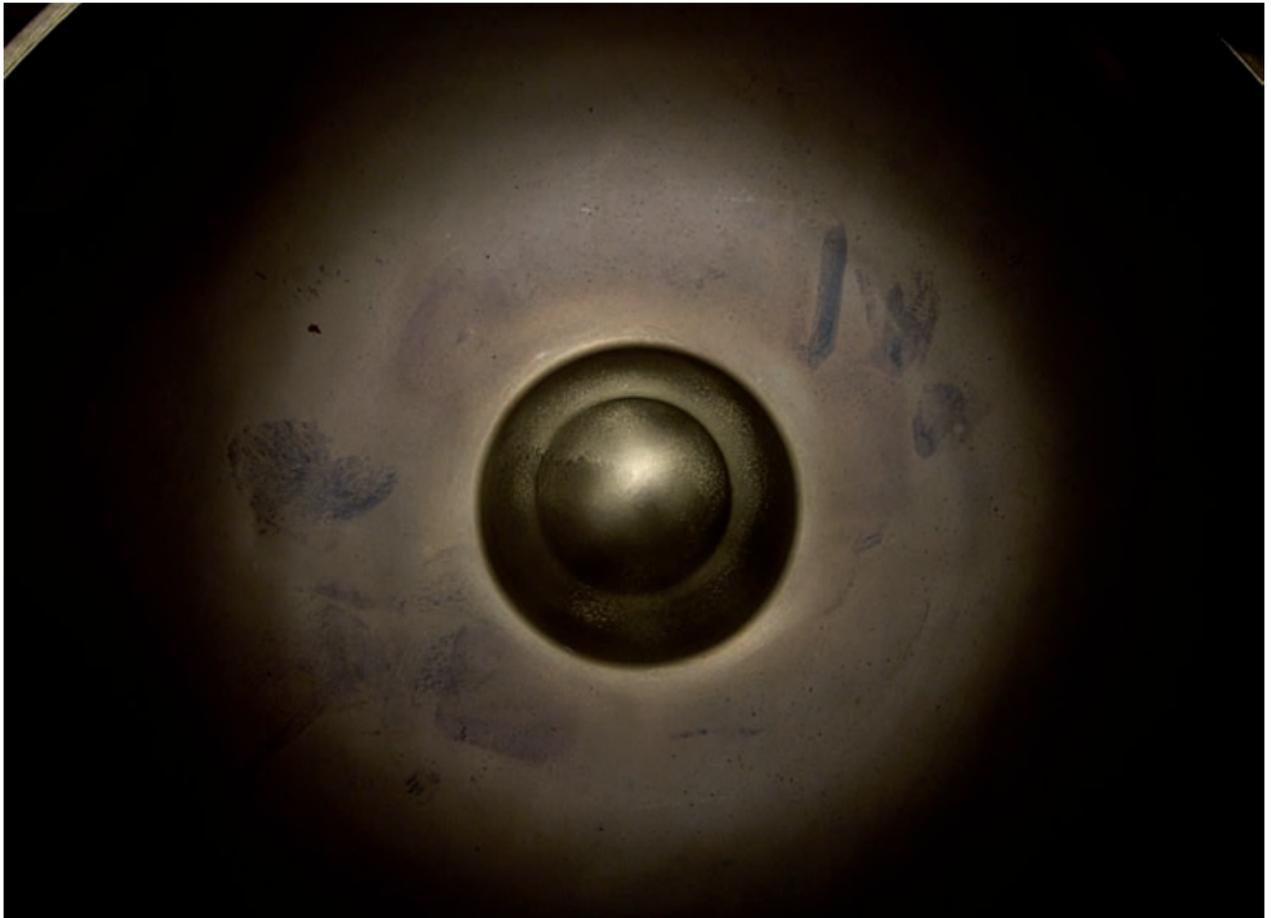


## **The Tao of Hang Playing**

We recommend approaching the instrument in freedom.

However, this much can be said: when the hang player takes the instrument on his or her knees, stimulating the body of the instrument with the heel of the palm evokes a bass tone. This tone can be adjusted by varying the angle between the legs, and brought into resonance with the ding (D3): then the hang will fill with sound. Touching the hang anywhere engenders a response. Follow it. Let your body interact with the vault of the hang: the hands follow, the fingers dance. Listen inwardly. At times, pay attention to the sound of the hands as they touch the surface, at other times pay attention to the musical results, at other times pay attention to the voices of angels in the realm of the overtones, and sometimes ... pay attention to nothing at all.

We wish you much joy and inner peace.



## **Agreement**

### **1. The philosophy of the company PANArt Hangbau AG**

The musical instruments of the company PANArt Hangbau AG are individually crafted creations produced by the Hang instrument makers on the basis of patent No. 693 319. The instrument makers are keen to foster and promote traditional musical expression with these new instruments and to make them available to a wide group of individuals, irrespective of their income or financial circumstances. For this reason, senior management at PANArt Hangbau AG has decided to enter into so-called droit de suite agreements with the buyers of PANArt instruments. This is intended to prevent the instruments being commercialised to the detriment of the maker and the institutions with which the maker is associated. By signing this Purchase Agreement, the undersigned Buyer acknowledges the following obligations:

- to inform PANArt Hangbau AG without delay of any form of sale of the musical instrument, specifying the sales conditions and the address of the buyer, thus enabling the Seller to update the catalogue raisonné; the obligations arising out of this Agreement must be imposed upon the buyer at the time of each sale;
- in the event of a sale in return for payment, the owner of a Hang instrument shall grant PANArt Hangbau AG a pre-emptive right. PANArt shall have the right to buy the instrument back at a maximum price equal to the original purchase price, although shall not be obliged to buy the instrument back, depending upon the condition of the instrument;

- should PANArt Hangbau AG fail to make use of its pre-emptive right, the party who has resolved to make the sale shall be obliged to inform PANArt Hangbau AG within the aforementioned sense.
- The owners undertake not to sell the instrument at a price higher than the acquisition price.

## **2. Material and legal warranty**

PANArt Hangbau AG confirms that the instrument has been created by their Hang makers Felix Rohner and Sabina Schärer. The instrument shall be dispatched in a protective cover, packaged in a specially-created cardboard box. The instrument may be sent back to PANArt Hangbau AG within 7 days following receipt. The purchase price shall be reimbursed, insofar as the instrument is not damaged. The cost of the return consignment shall be borne by the Buyer. The company PANArt Hangbau AG shall accept no warranty if the Hang has been handled carelessly or improperly repaired by a third party.

## **3. Contractual penalty**

Any breach of this Agreement shall incur a contractual penalty equivalent to the purchase price.



PANArt

22.Jan.08

H 33

*Handwritten signature*

*Handwritten signature*