

FASCINATION TRANSROTOR METROPOLIS





# ENVOY FROM PHONO OLYMPUS

Outside of usual standards in terms of size, weight, and price, the super turntables from Transrotor reside in their own analog cosmos. STEREO took a trip there with the Metropolis.

Text: Matthias Böde

**T**hey are as popular as they are admired as centerpieces at hi-fi shows and fairs: the super turntables from Transrotor, which draw all eyes like phono sculptures. They seem to come from a virtually untouchable analog sphere, to which we mere mortals hardly have access. Because these turntables are too big, too expensive, and indeed unfathomable in every respect, even for our dreams.

That's why it's hardly conceivable to bring one of those giants to our office for a review or even just for a listening session. But Matthias Böde, the author of this story who handles the lion's share of reviews in the analog/phono sector at STEREO, is not entirely unfamiliar with such dimensions. After all, his initiative almost 35 years ago launched the first mega-project of the manufacturer from Bergisch Gladbach, Germany (see box) and thus contributed to the ancestor of all ultimate Transrotor turntables.

We only realized what we had gotten into with our desire to experience the current hypermodel from Transrotor, the 360-kilogram Metropolis, in our own listening room when the Transrotor crew arrived. Six large boxes contained the parts from which a Metropolis that costs a whopping 180,000 euros is assembled, not even counting the tonearms, of which up to two can fit on the turntable.

Such an undertaking needs to be plan-

ned precisely. Since only skilled professionals can handle the assembly of this analog giant, Transrotor employees Lars Hornung and Thomas Süßmann first went about setting up the Metropolis in our photo studio. We followed attentively step by step, gaining insight into its design finesse.

## Aligned to the center of the earth

The Metropolis, which would have fit wonderfully as a technological object of fascination from a distant world in Fritz Lang's futuristic silent film dystopia of the same name, is essentially made of brass and acrylic. The basic concept features two elements: the massive stand resting on five



The drive unit with the three motors is made of solid aluminum. In sum, the three drive belts exert no lateral forces on the bearing, so that it runs without tilting.

Photos: STEREO, Manufacturer



In the long arm, Transrotor had mounted its top MC Tamino, little-known to us until then.



Before mounting the platter, you look at the drive disc fitted with magnets.



The torsion-resistant sandwich tonearm bases have a handle for easy height adjustment.

## ANCESTOR OF THE METROPOLIS

In 1991, Transrotor's first ultra-turntable was created as "VISION"

Its name could hardly have been more appropriate. Because the turntable, which saw the light of the analog world about 34 years ago along with a prestigious stand, proved to be downright visionary. And it became the starting point for all subsequent mega-turntables from Transrotor.

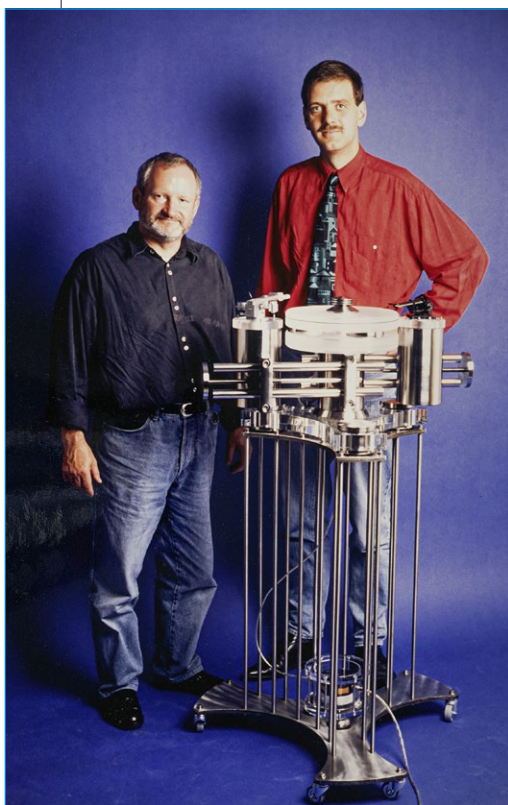
The Transrotor VISION was created as a project by Transrotor founder Jochen Räke (l.) and

our colleague Matthias Böde, who wrote for the renowned magazine "HIFI VISION" at the time. He was already infected with the phono virus then and wished for a unique turntable for testing phono cartridges and tonearms, and as an ultimate reference, which could accommodate long and short arms alike and was also beyond any doubt in terms of quality.

In Jochen Räke, Böde found a partner who was excited by this idea and got to work immediately. When the trained mechanical engineer with a passion for analog technology presented the first designs and drawings, everyone was amazed. No one had imagined the Transrotor VISION to be so huge and massive, not even in their wildest dreams.

Mighty cylinders, held by thick rods, carried tonearm bases made of acrylic, typical for Transrotor. After loosening large Allen screws, these could be moved on a double-rod-system depending on the arm length. The double platter, with heavy metal weights between the acrylic layers, was set in motion by a trio of motors back then as well. The power supply unit in its clear acrylic housing was found at the base of the foot formed by steel rods, which gave the heavy turntable an almost graceful appearance.

Subsequently, the Transrotor VISION, produced in small quantities and costing around 30,000 DM back then including the stand, was a much admired highlight at many HiFi shows. To this day, it has lost none of its appeal or quality standard. This analog work of art shifted the standards as well as the world of ideas and thus opened the door for super turntables like the Metropolis, which might never have existed without the VISION.



solid spike feet, which is not just decorative but an integral part of the elaborate concept, and the actual drive suspended in a gimbaled fashion. Thanks to ball bearings in the base, this unit can move horizontally in any direction. With this construction, Transrotor aims to solve the problem of a vibrating floor systematically.

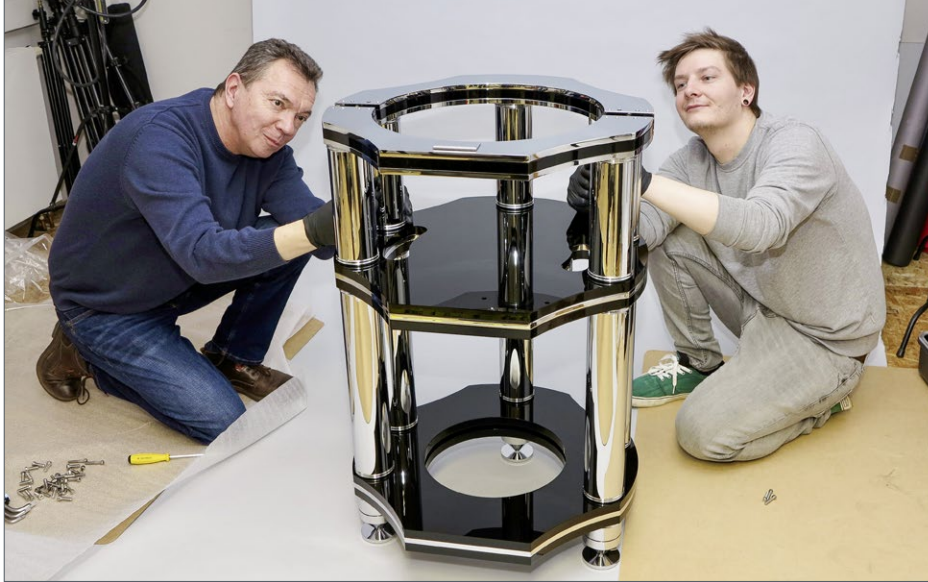
Contrary to popular belief, the movement of the ground is not piston-like but rather wave-like. The idea behind a pendulum turntable, like the Metropolis, is that the stand, which already weighs 160 kilograms and is unlikely to be excited, moves not only up and down but wave-like, while the turntable stands still within it, unaffected.

This is achieved with an ultra-heavy pendulum at the lower end of the drive unit, which aligns it vertically towards the earth's center and keeps it stable in that position – even if the base moves slightly. Depending on the number and weight of the mounted tonearms, three massive cylinders, adjustable on their transverse axis at the lower end of the cantilever, precisely level the upper ring where the platter and tonearm(s) are placed.

In the upper part of the pendulum housing, the drive unit in the form of a massive disc made of black lacquered aluminum is placed. Three precision motors are embedded in it, each setting the central disc made of the light metal in motion via a short belt. This happens without lateral pull on its bearing, as the tensile forces of the three belts cancel each other out. Thus, there is no tilting of the axis.

Ten magnets are visible on the surface. The same is true for the aluminum sub-platter sitting opposite of it, which is reinforced at its outer edge with round brass weights to increase its moment of inertia.





Transrotor employees Lars Hornung (l.) and Thomas Süßmann assembled the Metropolis – here the stand foot on its own – for the cover shot on page 60 in our STEREO studio.

These rotate just below the top platter during operation, giving the impression of watching a gigantic watch tourbillon. Only that this one doesn't rotate back and forth but always clockwise, which has a somewhat hypnotic effect.

### 20 Magnets for the TMD Bearing

The magnets are positioned so that they repel each other and play a central role in the patented "Transrotor Magnetic Drive", or TMD. This term stands for the non-contact propulsion of the actual drive by magnetic force. In practice, the magnetic fields push against each other. The coupling is chosen so that the motor's torque is coherently transferred to the record platter. Yet, the "magnetic cushion" is also soft and yielding enough to absorb tiny irregularities without passing them on.

The manufacturer from Bergisch Gladbach is known to use its TMD bearing in many of its turntable models. quite often, it can be retrofitted in a simpler form, where two counter-rotating discs are combined in one bearing housing. During some reviews in which STEREO compared both variants, we were convinced of the advantages of TMD regarding musical timing and silence.

This is unlikely to be different in the Metropolis, although in this case, it should be noted that the 19-kilogram platter alone ought to provide a considerably smooth operation. The trio of motors gets its power from a generously dimensioned external power supply unit, which, thanks to its thick, chrome-plated housing planks, also weighs around 19 kilos. It contains two powerful transformers and delivers a highly constant supply voltage.

A so-called Wien bridge, where one branch is formed by a band-pass filter and

the other by a voltage divider, ensures stability in generating the sine wave for motor control independent of temperature. Two small openings in the front panel allow access with a thin screwdriver to miniature potentiometers for fine-tuning the speeds.

In the stand of the Metropolis, this noble "control unit" finds its exclusive place. Turning the solid knob in the center of its front panel to the right sets the platter in motion at 33.33 revolutions per minute. Another click further, and it accelerates to 45 rpm.

### Sophisticated Resonance Concept

All these features – TMD bearing, PSU with Wien bridge, massive platter – are also present in Transrotor's Rondino nero, which has served as our practical and unerring reference turntable for many years. That also goes for the cantilevers for the tonearms, which in the Metropolis, however, can be adjusted in height simply via easy-to-grip end pieces.

These were constructed in both cases in a sandwich design, meaning a central brass layer is sandwiched between two layers of acrylic. At Transrotor, it has long been discovered that these materials perfectly complement each other concerning their vibration behavior. On the whole, the entire Metropolis does not rely solely on its sheer mass but also employs a sophisticated, specially developed resonance concept.

For the tonearms, the Transrotor team selected two models from their own product range. One TRA 9 in nine-inch length and a correspondingly longer TRA 9 in 12-inch length. Thanks to the fact that the outriggers, which can be locked in place like a vice, are freely pivotable in their un-

## "ENTHUSIASTIC EVERY DAY"

Dirk Räke, CEO  
of Transrotor

Mr. Räke, who  
needs a 180,000  
euro turntable?

Well, apparently all those who want and buy one. The Metropolis is a project that meets ultimate demands and with which we can demonstrate what is achievable when effort and price don't matter.



Who actually buys a  
Metropolis, wealthy vinyl  
enthusiasts or is it more of a  
noble accessory for newly  
rich sheikhs?

In fact, the latter do not buy a Metropolis at all. We actually know many customers, as we are usually present when one of our super turntables is set up anywhere in the world. From my perspective, I can say that all buyers own large record collections and are simply looking for the ultimate playback device that they are enthusiastic about day after day.

What scale should one  
imagine in this context?

About three to five turntables the size of the Metropolis leave our factory in Bergisch Gladbach, Germany per year. The main markets are in Asia, but also in the USA. Before the war, Russia also had a good share. A few customers can be found in Germany as well.

How important is the label  
"Made in Germany" for these  
customers?

Very important! The fact that we only collaborate with selected specialist companies from our area for mechanical parts holds an extremely high value for the customers. It also makes it easier to fulfill individual wishes. There's currently a request for a gold-plated Metropolis, for example. Difficult, but doable!

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locked state, the bases do not need to be changed even when swapping arms at a later point.

While the manufacturer used to employ tonearms from the specialist manufacturer SME, since the end of 2020, it has become autonomous in this regard. As we found out when comparing the SME 309 and TRA 9 on the Rondino nero, Transrotor doesn't need to hide its meticulously crafted arms with their telescopic tubes or minimal-tolerance ball bearings from the SME models, which are deservedly famous for their quality. On the contrary!

The TRA 9 is available in matte black, with chrome-plated or gold-plated parts, as well as in a sinfully expensive "Ruthenium" version (about 7,100/7,750 euros), which corresponds to dark chrome and looks incredibly good. In this very version, the tonearms for the Metropolis were chosen – after all, in for a penny, in for a pound.

Regarding the cartridges, the team from the Western German city of Bergisch Gladbach also relied on its own portfolio. Of course, Transrotor doesn't have the capacities for the delicate manufacturing of phono pickups, but essentially sources them from the British supplier Goldring. There, the cartridges are produced according to the exact specifications of the German customer.

### Top MC-pickups on the tonearms

While the TRA 9 was equipped with the tried and tested "Figaro" MC for 2,800 euros, which consistently impresses us with its linearity, tracking ability, and playfulness on the black arm of the Rondi-



Like the entire Metropolis, the pendulum details show the mix of precision and mass.

no nero, the twelve-incher was equipped with Transrotor's "Tamino", little known in Germany otherwise, priced solo at 13,000 euros. The fact that lowered bundle prices apply for both cartridges in combination with a turntable – then 2,240 and 10,400 euros – may only be a slight consolation.

The "Tamino" comes from Japanese manufacturer My Sonic Lab, where mastermind Yoshio Matsudaira-san crafts it from exquisite parts. Expectedly, the "Tamino" matches the long Transrotor tonearm perfectly in terms of its mechanical properties.

After the photo session, the Metropolis was expertly disassembled and moved to our STEREO listening room, where our reference system was already waiting for the "Turntable Majesty". This setup includes Nagra's phono preamp Classic Phono, the pre/power amp combo Accustic Arts Preamp V/Amp VI, and a pair of B&W 801



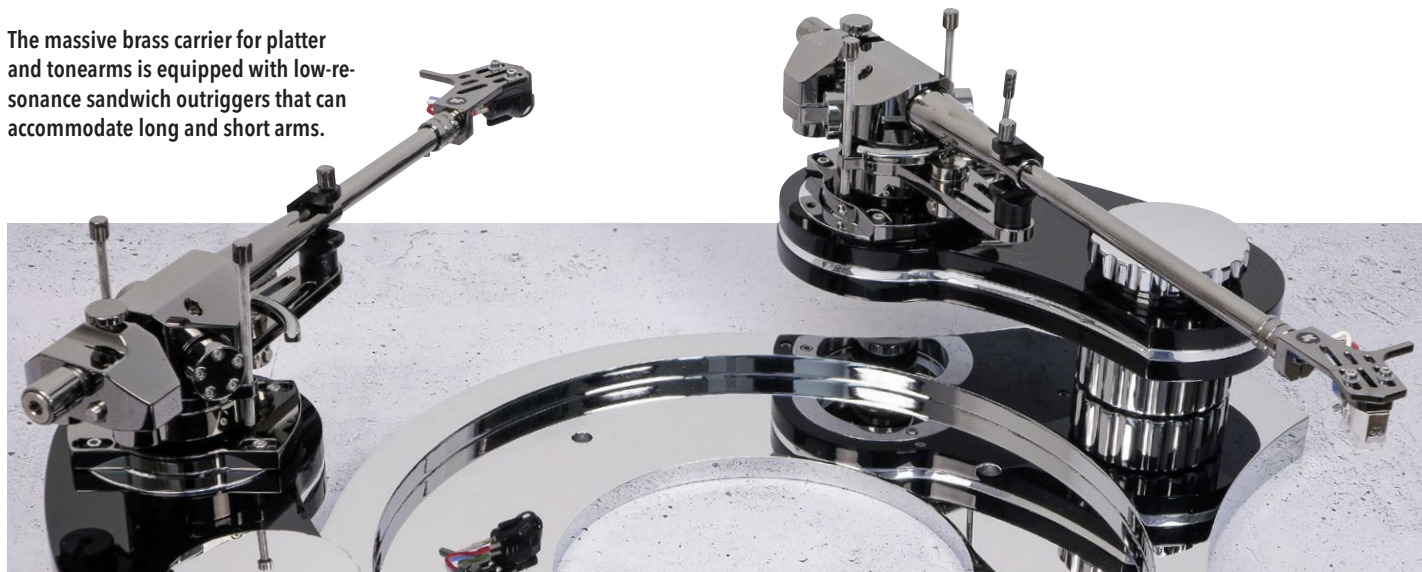
The giant pendulum with chrome-plated brass weights is a feast for the eyes.

D4 speakers – discreetly supported here by Martin Logan's subwoofer Dynamo 12.

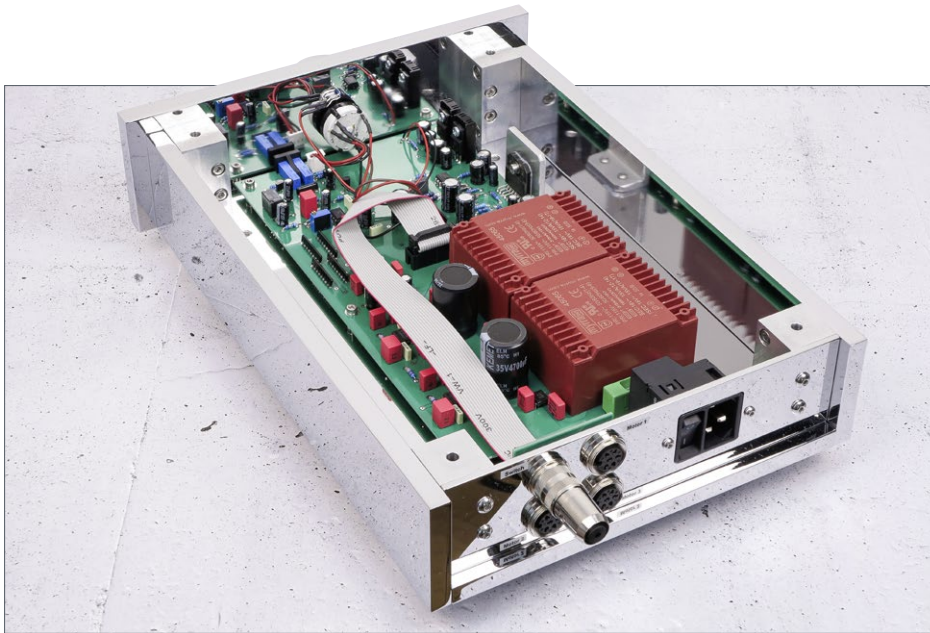
Atop Creaktiv's high-end "Reference" rack, our trusty Rondino nero rested, also equipped with TRA 9 and Figaro, with an overall price of 20,735 euros, nevertheless. Alongside the Metropolis, it however seemed like its social edition, and not only in that regard.

A 2.5-kilogram stainless steel ring fitting exactly into a groove at the edge of the platter and further increasing its weight is also part of the Metropolis package. When placed onto a record, it presses the LP firmly onto the base and, along with the centrally placed puck, counteracts vibrations within the record and flattens warped copies. It would be silly if the effort in the turntable was to be ultimately counteracted by a wavy, resonating record, wouldn't it?

The massive brass carrier for platter and tonearms is equipped with low-resonance sandwich outriggers that can accommodate long and short arms.







The generous power supply unit contains two transformers in parallel configuration and is supposed to deliver precise and constant sine signals for motor control. It allows fine adjustment of speeds.



A 2.5-kilogram stainless steel ring fits exactly into a groove in the platter and onto an LP.



When positioned correctly, the ring weighs down the record and straightens it.

And with that, we were finally ready to actually place a vinyl record on this magnificent analog altar. What happened then would seem worthy of adoration not only to lovers of the black discs. For this phono mass with Transrotor's high priest at the center, we had selected some special vinyl treasures, on which we first placed the "Tamino" on the long arm.

### Sound without Limitations

Such as Pat Coil's insanely lively album "Just Ahead" – a recording from the legendary Sheffield Lab. In "Escape Clause," the percussion blasted so short, dry, and defined from the speakers as we'd never experienced before. The impulsiveness, which always knew how to go one better, was simply spectacular. From seemingly nowhere, Accoustic Arts' strong power amp hit

the woofers of the B&Ws with the piece's hard drum kicks, almost at will.

"Aqua Marine" from the Isao Suzuki Quartet, with its sonorous, purring bass, the rushing cymbals, and flashing chimes, was presented by the Metropolis incredibly delicate, substantial, yet contoured and perfectly detached. And it lent the captivating song – a sacred entity for audiophiles – from the label Three Blind Mice an inner tension hardly ever heard before.

This musical tension and crisp refinement was not something the usually impressive Rondino nero could offer. Not only did it depict the sound images tighter and more compact, it seemed less focused compared to the Metropolis' performance, which also proved its exceptional class in this way, making the Rondino seem less targeted and almost somewhat lax.

## WHAT WE'VE HEARD



### PAT COIL: JUST AHEAD

Stunning dynamics and lively vibrancy – this record offers plenty of it.



### THE FAMOUS SOUND OF THREE BLIND MICE 1

This double LP delivers top acts of the cult label in the best sound quality.



### LYN STANLEY: NOVEL NOËL

Amazingly realistic captured big band songs with vocals from subtle to hearty.



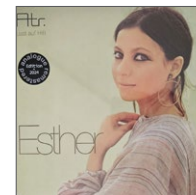
### FOURPLAY: FOURPLAY

The Metropolis never plays cooler than with the tracks of the studio cracks in the Evolution reissue.



### DIANA KRALL: LIVE IN PARIS

Still the benchmark in terms of detail richness and authentic live atmosphere.



### ESTHER OFARIM: ESTHER

Whether as original or reissue: The intensity and colorfulness of this record are hard to top.



### HIFI FLAMENCO

Marvelously rattling, stomping, clapping, and singing on this One-Step LP with JVC tracks from the 1970s.



For more information and all STEREO playlists, scan the QR code.



## FASCINATION TRANSROTOR METROPOLIS

Faced with the enormous energy and radiance of this analog giant, our reference had to concede defeat.

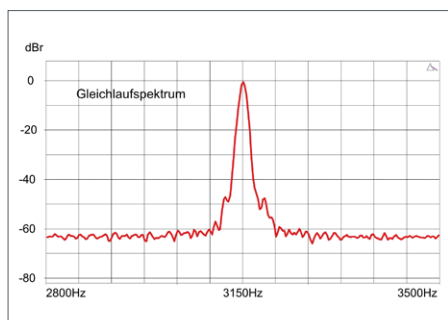
Considered among the very best sounding records ever pressed in vinyl is Lyn Stanley's Christmas album "Novel Noël", featuring the "International Recording Artist" with her Big Band Jazz Mavericks. It also includes less contemplative pieces such as the cheerfully swinging "The Way You Look Tonight."

In an ideal world, the stunningly realistically captured song stands wide, sparkling with detail, breathing dynamically, and exhilaratingly fast. And this ideal case was present here in the form of an almost live-like performance without tangible limitations. Our reference chain played as if unleashed. And, folks, it was really loud!

### „Nailed to the Wall“ by the Bass

No question, what the Metropolis, Tamino and the twelve-inch TRA 9 conjured up tended towards infinity in terms of awesomeness. Buyers of a high-class Transrotor turntable – it doesn't have to be a Metropolis – should definitely consider the long tonearm and also listen to the MC from Matsudaira-san's skilled hand. But only if you can afford it. Because you certainly won't give it back.

The unwavering determination, stri-

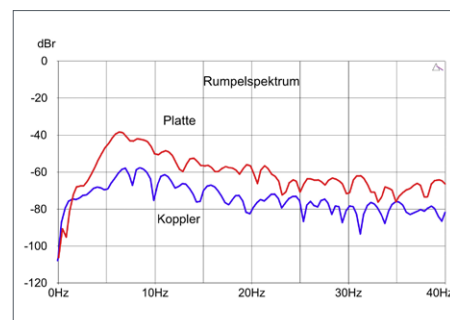


**Excellent synchronization with a narrow peak. Thanks to fine-tuning, very precise speed.**

king power and calm composure of the ultimate arm/pickup combo wasn't quite achieved by the shorter TRA 9 and the Figaro MC. This setup was however still clearly superior to the identical duo on the Rondino nero because the Metropolis was the foundation here, which made the difference.

By the way, we always switched the tonearm cable for maximum fairness in all comparisons. Even this slight pressure was enough to gently set the lightly suspended pendulum mechanism in motion.

James Taylor's "Her Town Too," which we have already listened to a hundred times before, was the next "hit", in the literal sense. Its fat yet structured bassline



**In its low rumble values, the Metropolis reveals the quality of its platter bearing.**

came from the MFSL issue of the album "Dad Loves His Job" so spectacular and simultaneously sharp and contoured that it simply dazzled the audience. At higher volumes, one felt almost nailed to the wall. And with the duo of the twelve-inch TRA 9 and the Tamino, the Metropolis achieved this feat even more impressively than with the shorter arm and the Figaro. These ultimately didn't attain the stupendous accuracy and natural ease of the large combo.

Pleasant shivers crept down our spine when Anne Bisson sensitively intoned her "Blue Bayou" over the giant turntable, showing – pure goosebumps – much finesse and warmth. As ruthlessly as the



In the STEREO listening room, the Metropolis played right next to Transrotor's smaller Rondino nero. Our reference components from all areas turned its performance into an incomparable high-end listening experience.



The heavy upper support plate of the pendulum is also made of chrome-plated brass.



34 years later: the founder's son Dirk Räke and Matthias Böde – now with the Metropolis.

Metropolis can strike, it works subtly, gracefully, and rich in shading when it comes to delicately constructed music. Therein, it seems to shape the sound images with quick, pointed fingers deftly.

### First-class Measurements on Top!

Of course, we also wanted to measure the mega-Transrotor – fascination or not. Okay, the colossus couldn't be lifted onto the 150-kilo table in our STEREO lab, where turntables usually prove their mettle. So the mountain came to the prophet, and the

measurements were conducted directly in our listening room. The heavy stand was supposed to keep noise coming from the ground effectively away from the turntable. It did, and in terms of synchronization, the turntable even achieved top scores.

Ultimately, Transrotor's Metropolis cannot be ranked. It eludes almost every comparison in nearly all parameters. And the wish to keep this turntable of superlatives in our office may be a devout one, but remains unfulfillable. Soon, it will be dismantled and disappear again into higher spheres. Even for this dream, the analog messenger of the gods is just too big, too expensive – and simply beyond the world this side of the Phono-Olympus! ■



The aluminum sub-platter, which is also impeccably worked inside (above), has the same number of magnets as the drive disc. Chrome-plated brass weights at the outer edge increase its mass.