



product profile

Well Tempered Lab

Amadeus Turntable

\$3750 (excluding cartridge)

After a great day listening to some new hi-fi gear at in Christchurch, Denco Audio's Mike and Frank started muttering about a mysterious, "really, really interesting" turntable they wanted me to hear. I had to wonder how it could be more impressive than the superb kit that had filled my morning. It turns out that this unassuming turntable was as special as they said.

The photos don't really do the Well Tempered Lab Amadeus justice; it's even simpler in the flesh, stripped down to the essentials in a way that is the antithesis of many high-end turntables. Where some supremely capable 'statement' turntables are about more mass, more bulk and more complexity, the Amadeus makes do with less of everything but it epitomises the cliché about punching above its weight class.

The design principles of the Amadeus come from a 1977 paper published by The Bruel and Kjaer Company of Denmark called 'The Audible Effects of Mechanical Resonances in Turntables'. This groundbreaking paper found that the ideal tone arm should be both very light and extremely well damped to improve tracking and eliminate mechanical instability.

The Amadeus's tone arm is constructed of seriously light aluminium and is filled with a carefully chosen grade of sand to kill any resonances in the tube, but the most obvious departure from the norm is that the tone arm doesn't have a bearing. Even the very best conventional tone arm bearings have a minuscule amount of movement because they require clearance to function, but the Amadeus uses a golf ball (no, your eyes aren't deceiving you) suspended from a nylon filament and partially immersed in a silicone fluid. The golf ball is perfect for the application because it's made to a precise specification and the degree of damping can be adjusted by

changing how much of the ball is in the fluid.

There is a simple and elegant solution to ensure that the platter spindle is stable. The spindle rotates in a square hole cut into a piece of Teflon, which effectively creates a highly stable, zero-clearance bearing because the spindle is in contact with two points of the square at all times. This round peg in a square hole system is effective and rugged – a prototype Amadeus has been running continuously for two years with no wear in this area at all. Even the motor and drive belt are pared of any unnecessary complexity. The motor isn't a regular turntable motor, it's a proprietary servo controlled design and is ultra-compact because it is driving an acrylic platter with sufficient inertia for low wow and flutter with a virtually frictionless spindle bearing. The belt is a length of 0.004 diameter polyester filament, which is joined using a knot, with the motor pulley specifically designed to accommodate the knot.

The dual layer MDF plinth is also starkly minimalist but, along with an isolation base with feet made of a secret material (unobtainium?), the turntable is sufficiently isolated from external vibrations to allow the components to give minutely low levels of flutter and wow along with extremely accurate tracking.

Don't imagine for a second that the Amadeus is built with reckless cost saving in mind; it's based on science and experimentation. Designer William Firebaugh has been designing tone arms and turntables since the mid-'80s, and worked through hundreds of belt materials and as many as 50 prototypes of this turntable before he was happy.

To test those results the Amadeus was set up with a Dynavector XX2 MkII moving coil cartridge, Dynavector P75

phono stage, 200 Watt Consonance Calaf integrated amplifier and Monitor Audio PL300 Platinum series floorstanding speakers.

The Calaf/PL300 system with a Consonance Orfeo CD player had blown me away, so I was expecting a rewarding vinyl session. But I wasn't really expecting what I heard once the albums started to spin.

In short, the Amadeus gets out of the way and just allows the music to play like very few sources I've heard. My first thought was "natural", the second was "effortless", followed by "can I afford this thing?" The aforementioned Consonance CD player is superb but the Amadeus is in another league entirely. It's a virtual surgeon, with the stylus set free to extract every drop of information from the grooves in a way that all the alleged digital accuracy in the world can't quite match. There's a rightness about vinyl that is still spot on after all these years.

Listening to 'The House of the Rising Sun' by Cyndee Peters from Ortofon's *Test Record Three*, the Amadeus shows off a wonderful, cohesive musicality, with crisp detail and speed giving stunning agility to the leading edges of notes plus blindingly fast dynamics, especially on percussion, which was as sharp as a gunshot with not a hint of overhang. Peters's vocals were open, richly textured and locked in place on a wall-to-wall soundstage.

'The Well and It's Raining' by Jennifer Warnes from *The Well* were up next and I was hooked from the first beat. I've got a bit of a thing for that lovely voice and the Amadeus drew me in as if by magic, leaving me slumped in my chair, smiling as if I were stoned. Her vocals were breathlessly natural, lifelike and oh so damn sultry, with every rise and fall, every breath laid bare. Bass was deep but very tight, treble pure and loftily extended, and again the imaging was so precise I'm not convinced that

recorded music gets much better than this.

By now I must have been looking a little too relaxed, so the 30th anniversary 180g pressing of Pink Floyd's *Dark Side of the Moon* went on. This moody, menacing music shattered my blissful peace in less than 30 seconds.

Record noise was absent and the background was so quiet that to invoke the old cliché of calling it black doesn't really cut it. Nothing, zip, zero – the Amadeus plays only what's on the vinyl and not one iota more. There's an apocryphal story about Roger Waters playing *DSOTM* for his wife, who breaks down in tears at the end and he's quite pleased that it had that effect. Hearing it on the Amadeus I can fully appreciate her unease. This album has always been intense, emotional and atmospheric and it's all the more so when the volume is loud, really loud, with room-shaking dynamics, huge scale and the music is still utterly under control with absolutely no harshness and no need to turn it down.

My session with this turntable was a real musical highlight, so you'll understand why the only thing that could possibly hinder my acquisition of the Consonance CD player is the rather more pressing desire to own a Well Tempered Lab Amadeus.

The look on my face when I was told that the price was \$3750 spoke volumes. If I'd been told that the price was two, three or even five times as much, I'd still consider it a good buy and I can't see how anyone wanting a high-end turntable could pass the Amadeus by without an audition. In the funny old world of hi-fi, where turntables can easily cost more than a nice European car, this is a conspicuous bargain.

The final word scrawled in my notebook sums the Amadeus up quite nicely: "BRAVO".

■ BRETT GIDEON

(A full review of the Monitor Audio/Consonance system will appear in a future issue of *Tone*)

DETAILS

SPECIFICATIONS

- 10.5-inch aluminium tone arm
- Small DC motor with proprietary torque servo drive
- Acrylic platter
- Vinyl-coated plastic mat
- Dual-layer MDF plinth (GT version available with dual-layer black acrylic plinth)
- Polyester filament drive belt

CONTACT www.dencoaudio.co.nz

