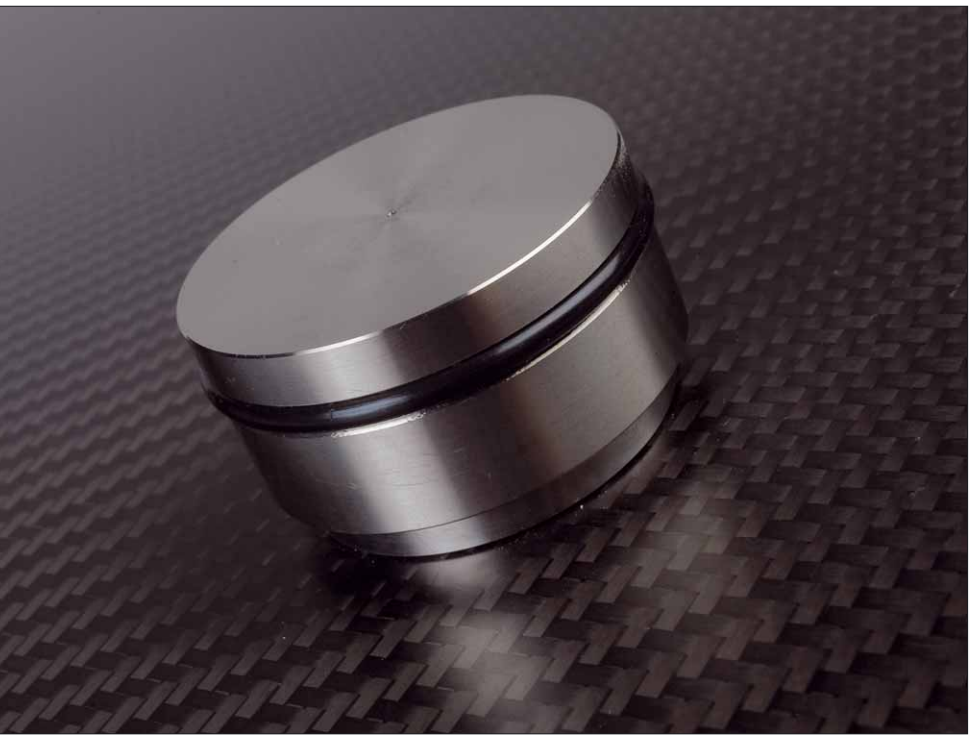
Fundamentals

Following the impressive return of the Paderborn manufacturer Finite Elemente with its Rack Pagode Signature MK II, it is time to go one step further.

Simple on the outside but blessed with a lot of high-tech: The Carbofibre bases

Fundamentals

This time, it's not about a rack but about device bases. And ones that, at first glance, have nothing to do with the rack we presented to you in LP 6/23. While delicate wooden surfaces dominated the scene last time, the high-tech material carbon fiber is now taking center stage.



„Fully tightened" is still the most stable operating mode

The bases in the „Carbofibre" range are designed to create the best possible working conditions for the appliances placed on them and to ensure that, on the one hand, no unpleasantness from the substructure reaches the appliances and, on the other, that mechanical vibrations caused by the appliances themselves are effectively dissipated and rendered „harmless" inside the bases.

These are precisely the tasks that are also attributed to high-quality hi-fi racks. The Carbofibre bases can be combined with pretty much all hi-fi furniture on the market. And, as you may have guessed, there is, of course, a rack series from Finite Elemente in which the technology of the separate device bases has also been integrated.

Structure

The „Carbofibre" bases are available as standard in two dimensions: 450 x 400 and 500 x 475 millimeters, which should suit pretty much all conventional components. Both models are available in 23 and 45 millimeters of thickness, with the thicker versions sporting a double-layer construction. This also results in their double maximum load capacity of 100 kilograms.

The internal structure of the Finite bases differs significantly from what is usually used in the hi-fi sector to support equipment. There is a faction that consistently aims for maximum internal damping

A fine thread holds the stainless-steel feet in place

through mass and uses stone (preferably granite) or constructions filled with sand. Their job is primarily to convert vibrations into heat, thus rendering them harmless. Then there is the faction that builds as light and rigid as possible and does not rely on absorbing vibrations but on dissipating them to where they no longer cause damage, i.e., into the floor. However, this is less a job for an equipment base and more for a complete rack system.

Finite Elemente combines both approaches. Their bases are planked with carbon fiber panels that unite low weight and rigidity. Inside sits a core consisting of a vertical honeycomb structure. Inspired by Mother Nature, this construction combines maximum strength, low weight, and minimal material usage in an almost miraculous way. For good reason, even load-bearing structures in aircraft construction are realized this way.

Teammates

Turntable:
· Sony P2250 / Garrott Optim S

Phono preamplifiers:
· Canor Asterion V2
· Soulution 550

Integrated amplifiers:
· Thivan Labs 811 Anniversary
· Accuphase E207

Loudspeaker:
· DIY MiniOnken / Klughorn /
· Focal / JBL

Competitors

Furniture:
· Ikea Lack

Four height-adjustable feet allow sensitive leveling

Nina Simone – Black Gold

What we played

Nina Simone
Black Gold

Monk Big Band And Quartet
In Concert

The Spacelords
On Stage

John Coltrane
A Love Supre

Such a structure is also common in the furniture industry - albeit with significantly less expensive materials: for example, a well-known side table from a Swedish discount store is constructed practically like the finite element bases. The difference is that the two „HD" models from Paderborn have a two-layer structure with an additional carbon fiber layer separating the two honeycomb cores. For turntable applications, the spirit level embedded on the top at the front has proved very useful, helping to align the base strictly horizontally.

Substructure

The Carbofibre bases are factory-fitted with four height-adjustable stainless steel feet. They are slightly offset inwards, which ensures a healthy weight distribution, but requires a certain amount of manual acrobatics when adjusting if you don't want to lift the base and the appliance standing on it. The four feet require a little more adjustment work than the commonly favored solution with three feet. However, it has the advantage of tipping significantly less. I would also have liked a solution for locking the threads: if you turn the adjustable feet out of their end position, the play in the threads on the top is noticeable. Not much, but considering the price of at least EUR 1,590 per base, that last touch of perfection would have been desirable.

Sound

I don't like it when expensive hi-fi components have to be given a helping hand with accessories such as bases before they can unleash their full potential - high-quality equipment should be immune to such influences. But they are not. The CFHD02 bases available to me proved this very clearly. Naturally, turntables react particularly sensitively to their substructure. In my case, it was a 40-year-old Sony direct-drive turntable that blossomed sound-wise to an almost shocking degree on the luxury base: The previously contoured and powerful bass range thanked the measure with significantly more color and nuances, I didn't even realize how „gray" the setup had played before. Nina Simone suddenly felt audibly more comfortable in my living room; she seemed more emotional and moved much closer to the listening position.

And since I have touched the topic, I have actually tried the same with the top of the aforementioned Ikea table for comparison: Sorry, dear money-savers, their effect cannot be compared with that of the Carbofibre base, the differences to operation without a base are only perceptible to a minimal extent in this case.

Next candidate: The superb Canor tube phono preamp, which we report on elsewhere in this magazine. Operating it on the CFHD02 yields such dynamically impressive results that I found operating it without the substructure afterward difficult. The sound gains were noticeably less pronounced with semiconductor electronics but still present. If you think you've come a long way with your system, I strongly recommend you try the finite element bases. I'm pretty sure you'll be just as amazed as I am.

Holger Barske

Especially welcome when used with turntables: the circular spirit level

Finite Elemente Carbofibre

· Price	ca. 1,600 Euro
· Distribution	Finite Elemente, Paderborn
· Phone	+49 5254 64557
· Internet	finite-emente.eu
· Warranty	2 years
· Dimensions (W x H x D)	550 x 475 x 45 mm

Finite Elemente Carbofibre

International 1/24

» The finite element bases are among the most effective sound tuning measures I have ever encountered. Turntables and tube devices, in particular, benefit enormously from operating on these high-tech solutions.