

MUSIC[®]

emotion



Meridian

Ferrari F80



Art Sound & Canton

EN VERDER:
INTERVIEW HERMAN VAN DEN DUNGEN
VOORBESCHOUWING PLUIMGRAAFF
MARANTZ PMD671
USHER 1.5
PINK PROJECT
ISOTEK MIRA NETFILTER
YARADESIGN TRIVIA



JVC

DLA-HD-100



8 710966 000991

OLD underwear and shirts

One thing is for sure, your eyebrows will wrinkle, while reading this title. Strange for a renowned magazine as this. I will explain.

In 1965, as 15 year old boy, i was working on a loudspeakerproject for my first studio. I used two Philips tube amplifiers and three Philips recorders (see also www.sts-digital.nl/history). It was a simple design using two doublecone units AD9710M8, made by Philips also. It were 8 ohms models and by paralleling them I got 4 ohms. Basically it was a sturdy frontpanel with two holes for woofer mounting. Two sidepanels were folded towards each other with a space of around 10cm at the back. The sound was honking a bit to much and to avoid that i stapled some old underwear and shirts inside it. I had never heard of damping material for loudspeakers at that time. Many years later I investigated the possibilites of excisting damping materials. Of course we all know the eggfoam material. For low frequency damping not working sufficiently, for mid- and high frequency range it is adequate. Then we have thick kind of polyether, which is also in my Kharma speakers and this is a serious damping material. Often a flock of Baf wadding is added. For damping of the midrange unit (Thiel), Kharma is using sheepwool. Probably there are lots more interesting damping materials where I am not aware of.

Last month I got a phonecall from an audiophile working at Teijin Aramid. If I had time for a visit and showing something new. Next evening two people are at my door with a plastic bag of.....hmmm, what could it be?

TWARON

The surprise is a new damping material for loudspeakers, actually made for another purpose (f.e. bulletproof vests, harmour of tanks, etc.), but curiosity made them try it in a loudspeaker to find out how it would work. It works that good that the company decided to let the world know about this possibility and would like Music Emotion to write an article about it. The product is called TWARON "Angel Hair". By a stapled fibre process the infinite long wires are curled and then chopped in 5cm long parts. After that this wires are carded to gain an open structure in this material. The fibers are only 12 micrometer thin, about ten times less then a human- or sheephair. We take out the sheepwool in the midrange chamber of my Kharma speaker and exchange it by 8 grams of this TWARON material. Twelf ears are are pointed to discover if we would notice any changes; Our "golden ears" team and the two audiophile Teijin engineers were the panel. Unanimous we come to the conclusion that there is a significant increase of midrange, but not in the wrong sense, the ambiance of the recording increases and for example the sounds of a concert hall, moving chairs, mechanical sounds of instruments, are way better noticable, this all while not degrading the already existing sound. What will happen if we increase the amount of used Twaron? We ended up at 20 grams in the midrange chamber; we all concluded that this was the right amount for a wonderful open sound.

SUCCESSFORMULA

We never enjoyed the reference recording of Rachmaninoff Symponic Dances more, the appreciated bows above and behind the speakers (ME 11-07) are exceptional increased, very impressive. By now Teijin installed a worldwide distributor, ELTIM audio BV in the Netherlands (www.eltim.eu) and despite the fun I had so many years ago damping loudspeakers back in 1965, it appears that the audioworld still experiences a lot of innovations and the company Teijin Aramid takes initiative and will get, after this article is published, a lot of attention from the loudspeaker industry (some famous names already use it by now). Due to the heavy damping of reflections you don't need much at all. Therefore it is quite cheap in use, a pre to become a succesformula.

Note ELTIM Audio:

Fritz de With is the driving force behind the fantastic CD label STS Digital, well known by f.e. the perfect recorded Marantz test/demo CD's. check www.sts-digital.nl

