



PMC twenty5.23

Wednesday, January 11, 2016
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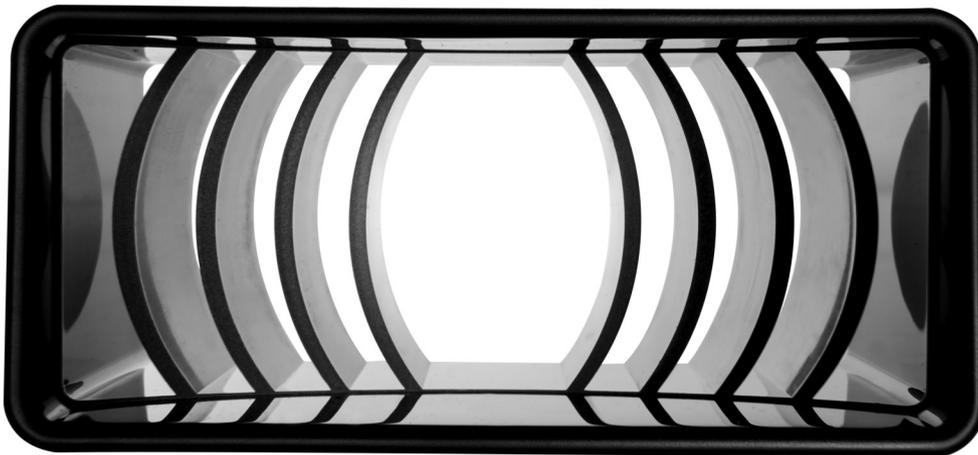
What's the connection between F1 racing cars and transmission line loudspeakers? Yes, you've got it, airflow. In an F1 car you want low wind resistance and equally low turbulence in the car's wake because that causes drag. In a transmission line (TL) you want the air to be able to flow out of the end of the line with the minimum of turbulence because that creates a barrier to airflow. This is why many reflex designs have radiused port openings but no one has identified the problem in transmission lines before, and come up with a solution. But PMC designer Oliver Thomas worked in F1 design before he joined the family firm, and that gave him the notion to look at what happens to the air as it escapes from the vent on the end of a TL. This vent delivers the lowest bass notes from the loudspeaker so its performance is critical to the overall sound, this became obvious when Thomas designed PMC's largest model to date, the QB1, a studio monitor with four 10inch bass drivers that's designed to operate at high SPLs (sound pressure levels) without distortion. By putting strakes or fins of the sort you see low down on the back of an F1 in the vent Thomas discovered that bass output and quality improved quite markedly. With a speaker of the QB1's prodigious capabilities that is perhaps not surprising, but PMC was so impressed that the so-called Laminair vent that it has been used across the company's latest twenty25 range.

Despite the similarity in appearance to the twenty series the new models differ in many respects and represent the next range up in PMC's catalogue. For a start they have a totally different type of cone in the main driver, up until now PMC have used doped paper cones across the board. The twenty5 series has woven glass fibre in its place, this was chosen because the stiffer material can deliver greater driver excursion and was originally the reason why Laminair was developed for the QB1. The greater excursion of the driver means faster airflow through the vent which creates turbulence that distorts the bass.

This new cone, dubbed g-weave, is stiffer and stronger than paper and can deliver slightly higher SPLs than is possible with an equivalent twenty series loudspeaker. The soft dome tweeter is very similar to that of the other range however, the main difference being a change to the grille in order to improve dispersion, a byword at PMC. The cabinets look similar but have also been improved, primarily by measuring their behaviour under load and using stiffer stabilising bars within the box to iron out any resonant peaks. The cabinet retains the backward lean that proved popular with the twenty series but in the case of the floorstanding

models is fitted with stainless steel stabilising bars that extend the spike footprint and incorporate cork isolators between bar and box in an attempt to reduce the transmission of vibration. Transmission line cabinets are inherently very stiff as a result of the inverted horn that forms the line but there is always room for improvement.

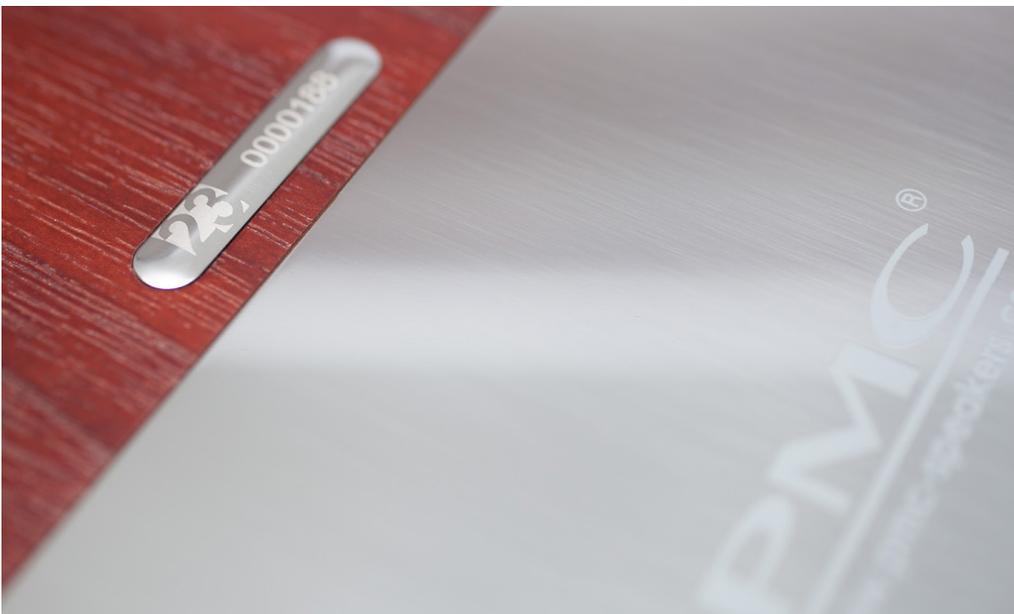
Comparing specs between the twenty.23 and twenty5.23 reveals that the newer model has marginally more bass extension but this does not tell you that the bass roll-off is much more gentle in the twenty.23 which means that the twenty5.23 sounds rather more powerful at low frequencies. In other respects the more expensive model is marginally shorter, heavier and half a decibel less sensitive. Being the smallest floorstander that PMC makes the twenty5.23 also the most domestically friendly and in my room at least it didn't need to be far from the wall (35cm) to deliver an even tonal balance.



Other changes to this range include a non magnetic stainless steel terminal panel, which looks nice and shiny but was chosen to give the crossover that sits behind it a magnetically inert mounting. The crossover itself is a fourth order type built on a glass fibre board with "the thickest possible" tracks. The best bit about the back however is the terminals, a single pair to keep signal paths short, and made from matte rhodium plated copper. The spikes are quite tasty too, machined from one piece of stainless steel they have a large cap for ease of adjustment and look great in the chunky support bars.

Sound

In a system with a Melco N1A digital server and Primare DAC30 source, Townshend Allegri pre and ATC P1 power amp the twenty5.23 sounds relaxed and revealing, easily able to articulate the gravelly voice of Paolo Conti and the speed of a tabla player's fingers. There is an ease to the presentation that makes you wonder if fine detail is being masked but it's all there in the context of a stereo image that totally escapes the slim cabinets and fills the end of the room. With a powerful amp like the 150 Watt ATC the bass is notably quick yet appealingly weighty, overall extension is limited by the size of the box but that doesn't mean it can't growl if you put something meaty in the signal, and it'll do so at high levels too without any tendency to sound grainy or forward. I mentioned this smooth presentation to Oliver Thomas who said that the



midrange had been tuned this way, it makes for a forgiving yet revealing balance that means the shortcomings of less refined amps and sources aren't mercilessly revealed. At the other end of the scale I tried the new Rega Brio integrated, a 50W amp costing £598, which managed to extract plenty of bass and deliver excellent image depth. The bass isn't as tight with this amp but neither is it wayward or boomy and for less than balls-out volume levels it makes a highly enjoyable partner for this PMC.

Back with the ATC power amp the fabulous subtlety of Javier Perianes piano playing (*Manuel Blasco de Nebra Piano Sonatas 1-6 Op.1*, Harmonia Mundi) was very easy to enjoy indeed, the speed with which the bass notes stop and start giving it pace and gravitas that adds to its charm. With the blues rock of James Blood Ulmer's 'Crying' (*Live at the Bayerischer Hof*, In+Out Records) the twenty5.23 delivers lots of space around the cymbals, a solid kick drum and the groove of the tight but loose rhythm section with ease, leaving centre stage to Ulmer's etched guitar sound.

The overall balance is warmer/smooth than I am used to with the PMC Fact8 floorstander, but this doesn't inhibit its ability to produce a full scale image and place a musician within it with uncanny presence. It's very revealing of source changes too, switching from the onboard DAC of the Auralic Aries Mini to the Primare DAC30 brings about a clear increase in detail and the ability to understand lyrics such as those of Thom Yorke on Radiohead's 'Deck's Dark' (*A Moon Shaped Pool*). A track that proved distractingly enjoyable.

The 23 was not the only twenty5 series model in my listening room at the time, I also had the standmount twenty5.22, which has a larger main driver and a dedicated stand. It sounds more immediate and exciting than the twenty5.23 and will appeal to the speed freaks in the audience. Both speakers share an effortless delivery and remarkably low perceived distortion but the floorstander will suit those with more mellow tastes or less refined amplifiers. I tried both models with a Rega Elex-R integrated amp (72W) and found that the 23 had a fuller upper bass which makes it sound richer through the midrange, a balance that works rather well



with Talking Heads' 'Crosseyed and Painless'. It also has a little more bass weight which suits this particular amp nicely, balancing out its slightly enthusiastic top end. Gregory Porter sounds as smooth as he should, and for once the sax break on 'No Love Dying' doesn't grate when played at suitable level. Live tracks deliver all of their scale, Ryan Adams' 'Hallelujah' being palpably present with real cinemascope imaging.

This is a speaker that does everything well, it may not be quite as edge of seat as its small brother but in the long term that is usually a good thing. What really impressed is the transparency to source, the twenty5.23 reflects the nature of the recording with precision and uncannily low distortion. Even at this price it's quite hard to make a speaker that has wide bandwidth, even balance and great timing without something getting out of line. Usually it's the bass but clearly the combination of the new driver and Laminair vent have produced a bass response that is class leading. As a long term Fact.8 user I am hearing things with the twenty5.23 that I would like more of in the bigger speaker, yes the Fact.8 is more precise and revealing but I for one am petitioning Oliver Thomas to turn his attention to the Fact range and give it the Laminair treatment. It really is that big a step, quite possibly so big that the larger twenty5 models surpass the Fact.8 already...