Subject: Why do we not include baffle height in BSC calculation?
Posted by GarMan on Thu, 13 Jul 2006 18:53:33 GMT
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In all the formulas I've seen for BSC values, only baffle width is considered? Shouldn't height and/or baffle area be part of the equation? For example, a speaker with a 8"x36" baffle would radiate lower at half space than a speaker with a 8"x12" baffle. Does this mean that if I take a 8"x36" speaker and turn it on its side, it requires a different BSC network because "width" changed from 8" to 36"?Gar.

Subject: Re: Why do we not include baffle height in BSC calculation?
Posted by Wayne Parham on Thu, 13 Jul 2006 19:35:40 GMT
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It's the smallest dimension that limits the boundary condition. An infinitely long, infinitely thin baffle is no baffle at all.

Subject: Re: Why do we not include baffle height in BSC calculation?
Posted by Martin on Thu, 13 Jul 2006 22:38:30 GMT
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The simple formula uses just the width as you state. I have an Excel worksheet on my site, under the General Speaker Related Articles page, that is based on this simplified approach. But as the calculations for baffle step response become more involved then the shape, size, edge conditions, and any room boundary conditions can be added into the calculation. My new MathCad worksheets take some of these additional effects into account when calculating the SPL resposne as a function of frequency. There is a sample problem provided on the Models page and a short write-up discussing the SPL response curve calculated by the new worksheets on the General Speaker Related Articles page.Hope that helps,Martin
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