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Subject: Re: Is Neo really the One? Oracle Cleo wouldn't tell me...

Posted by [Earl Geddes](#) on Thu, 27 Jan 2005 12:58:57 GMT

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DukeMost of the important points have been covered but one very important one was not even mentioned. First ALNICO does have the lowest flux modulation, followed by Neo and ceramic is pretty bad. But this problem can be fixed with a "good" shorting ring. BUT what was never mentioned is the thermal changes. ALNICO, owing to the fact that it is a hot cast material, has no change of flux with temperature thus it has the lowest possible thermal compression. Neo is pretty bad in this regard, but ceramic is really bad. A ceramic magnet can lose as much as 40% of its flux when heated to a typical temperature in higher output situations. We discovered this when making a speaker for an active exhaust system that got to about 150 c°. We found that at operating temperature the ceramic magnet had almost no B left. ALNICO was the only choice in this application. Of course the very best magnet, Samarium Cobalt, is just too expensive to even consider.

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