The View from Beijing

In October, I had the pleasure of attending the China Magnetics 2007 Conference sponsored by Intertech/Pira. Directly or indirectly, nearly every presentation made some reference to the recent run up in rare earth prices. I thought that Shuk Rashidi and Hi Harada did a particularly good job in explaining the reasons in their presentations: strong demand for neodymium, dysprosium and terbium for magnets, coupled with constrained supplies of rare earths from China due mainly to environmental factors. This creates a difficult situation with no single easy answer, although the application of several small solutions may help significantly.



(from left to right) Hi Harada, JABMM; Steve Russek, Astronautics; Alfred Heng, MMI Holdings; and Shuk Rashidi, Tridus.

At least two new resources, Mt. Weld and Great Western, are coming on stream. And one-time major supplier, Molycorp, is resuming production after a near decade-long hiatus. These additional sources will help, but not immediately. In the meantime, we need to apply our skills to stretch our resources by improving designs to use less magnet material, reducing waste and recycling.

Two things were clear to me at the conference. Most people understand that rare earth prices have risen and accept it without much question, even though most do not really appreciate the dynamics of the rare earth market that caused the increase. In addition, most people do not understand how much the increased prices of rare earth raw materials should affect the price of a magnet. If, for example, the price of neodymium metal goes up 10%, should the price of an NdFeB magnet increase by the same percentage? I would say no, it should be significantly less than 10%. I can say this with a smile because I am a consultant and do not set prices for magnets. The price of neodymium metal is just one component of a rather complicated costing equation; the percentage should not carry through unchanged. This is where the process is not very transparent and consequently many people are understandably confused.

So I would like to pose a question to the industry. Would a more transparent pricing structure be helpful? It seems to me that someone with access to Metal Pages and a rough knowledge of the compositions of the various grades of NdFeB could calculate and publish a series of price indices. This would give all interested parties a visible way to gauge what is happening. Something similar has been done for a long time with cobalt and while it won't eliminate price fluctuations, it does give everyone the same information and a sense that the situation is being handled as fairly as possible. If you have an opinion or suggestion on this subject, please be sure to let me know about it.

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Spontaneous Materials