

# **Magnetics Industry Overview** *by* **Walt Benecki**

## **2005 – Another Year of Significant Change in the Magnetics Industry**

This marks the first time that I've chosen to recount some of the major events that have occurred in the magnetics industry over the past year. 2005 was a year of significance considering the numerous major announcements that will permanently change the landscape of our industry, particularly in North America.

The year was kicked off in January with the announcement from Audax Group, a middle market investor group, that they had concluded the acquisition of Arnold Magnetic Technologies from SPS Technologies. For the first time in many decades, the company that began operations under the Arnold Engineering Company banner over 100 years ago has once again begun life as a private and independent company.

In February, Magnetic Specialty Inc. announced that it would sell its business and close its manufacturing facility in Marietta, Ohio. MSI was the original manufacturer of magnetic strip and sheet products, founded in 1971 by Ralph Murphy. 1997-99 was a period of turmoil for the company as they labored under the stress of a 22-month strike by the United Steelworkers of America. Six years later the company closed its doors and 125 employees lost their jobs.

In March, an announcement was made by Hitachi Magnetics Corp. that they would be closing their manufacturing facility in Edmore Michigan. Hitachi had purchased the facility in 1978 from General Electric and had been an important factor in the Edmore community and local economy for almost 30 years. For a community of 1,244, the loss of 120 Hitachi jobs represented a significant blow to the community. At one time Hitachi was a leading U.S. manufacturer of cast alnico, sintered alnico, hard ferrite, samarium cobalt and neodymium-iron boron magnets.

In June, Arnold Magnetic Technologies announced the closure of their bonded magnet facility in Norfolk, Nebraska. Arnold had acquired the modern 84,000 square foot facility from the Minnesota Manufacturing & Mining Company in 1992. A few years later the plant was expanded to accommodate growth in the injection molded market. The company plans to move its high-energy flexible ferrite sheet production to its Flexmag operation in Marietta, Ohio and to eventually relocate injection molded magnet production to China.

In August the International Magnetics Association announced a radical change in their organization aimed at expanding membership. IMA was originally founded in the 1950's as the Magnetic Material Producer's Association and has attempted, over the past few years, to respond to the changing landscape within the worldwide magnetics industry. The IMA now invites university, supplier, user and individual membership. This is intended to broaden the Association's scope and secure its future viability. Without an expansion of the Association's reach, its financial viability may come in question.

Later in August, an announcement was forthcoming from Midmark Capital that Kane Magnetics would be merged into Energy Conversion Systems. Kane Magnetics has been one of the leading

U.S. magnet and magnet assembly suppliers to the automotive industry for decades. Over the past few years, Kane had discontinued certain manufacturing operations in Kane, Pennsylvania, particularly ferrite powder and hard ferrite magnets. The combination with ECS appears strategically sound and now the combined and strengthened entity has over 2000 employees worldwide and an expanded product portfolio serving automotive, consumer and industrial customers.

In September AMR Technologies and Magnequench International announced a merger of the two companies. The combined company, now operating under the AMR banner, has a number one global position in Neodymium-iron-boron magnetic powders and a number two position in specialty rare earths. AMR's main powder manufacturing facilities are located in China and Thailand. This strategic combination now has an improved balance sheet and is well prepared to compete worldwide in their served markets.

In October, The Morgan Crucible Company announced the sale of its Magnetic Division to One Equity Partners. The primary element of this business is the Vacuumschmelze operation headquartered in Germany. Their product scope includes neodymium-iron-boron magnets, amorphous and nanocrystalline ribbon, soft magnetic cores and a line of superconductor products. VAC had previously announced the closure of its manufacturing operations in Elizabethtown, KY, originally the Crucible Magnetics operation. Morgan Crucible received what appears to be an attractive multiple of 1.7 times sales for their magnetics business. Shareholder and government approval for this transaction is expected before year-end.

And lastly, on October 14, 2005, the permanent magnet industry was saddened to hear of the passing of Port Wheeler, an industry icon for over fifty years. Port founded Wheeler Associates in 1969 and made many contributions to the magnetics industry. I first met Port in 1989 and found his experience, advice and counsel to be invaluable. Port announced his retirement at the end of 2004. He had been a driving force in the industry for years, consulting for many of the major players in our industry and serving as keynote speaker at many international conferences. Port will be missed.

In summary, 2005 will be remembered for a number of significant plant closures in the U.S. and a number of major mergers and changes in ownership within the industry. Significant U.S.-based manufacturing capability has been lost and some new investors are hopeful that their long-term trust in the demand for magnetic materials will result in strong payback on their investment. U.S. customers face a severely diminished local source of magnet producers and the inventory of local magnetics-related applications engineering talent is in decline.

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