Arnold Magnetic Technologies Highlights Custom Electromagnetic Capabilities for Aerospace & Defense Applications

ROCHESTER, N.Y. – Arnold Magnetic Technologies Corporation (Arnold), a subsidiary of Compass Diversified (NYSE: CODI) and leading global manufacturer of high-performance magnets and precision thin metals, highlights its custom electromagnetics used in aerospace and defense applications. Through exploring the deepest parts of space in search of near-Earth objects, Arnold's electromagnets (also known as solenoids) provide the flexibility needed in generating magnetic fields so necessary for critical waveguide applications.

As one of NASA's founding partners, Arnold's electromagnetics have been an integral part of nearly every government-sponsored satellite, including Doppler weather and radar systems and the US Air Force (USAF) Airborne Warning and Control System (AWACS). Arnold is also bringing its deep expertise to the development of the next generation quadrupoles and dipoles being used in electromagnetics for large fusion and pulsed power projects.

Arnold manufactures a wide variety of custom electromagnets that generate uniform or proportioned magnetic field shapes and with a wide range of magnetic field intensities. These electromagnets are either made up of tape wound foil wafers or built up from coils of wire.

All Arnold tape wound electromagnets feature coils that are electrically controlled to the precise field strength desired.

Depending upon specific requirements, magnetic field distribution may be uniform, or it may have peaks, plateaus, and valleys along the axial length of the electromagnet, Shaped field electromagnets can be custom-designed to specific configurations with great precision. Coils may be of various widths within the electromagnet and they can be made interchangeable.

Customers can select nominal ID and OD to meet application size requirements. Also available are special designs that use chilled oil or liquid nitrogen to allow higher than normal current, generating up to 200 percent greater field intensity than an uncooled design.