

FOR IMMEDIATE RELEASE

New Magma™ Advanced Pumping System Protects Shear Sensitive Products Such As Vaccines And Enhances Productivity In Bioprocess Applications

Princeton, NJ (October 1, 2006) - As the biopharmaceutical processing industry grows, new pumping options are required that offer low shear pumping action, sanitary and sterile pumping, and complete containment. To address this growing trend, PendoTech (www.pendotech.com) is introducing its Magma Advanced Pumping System (Magma APS). The Magma APS can be used for increased efficiency in several bioprocess operations including liquid transfer, crossflow filtration, and liquid-liquid mixing. The Magma APS control system has advanced features to optimize operation of its unique sanitary diaphragm pump. Performance data is available at PendoTech's website comparing the pumping of shear sensitive cells of an insect cell culture to a control bioreactor and a peristaltic pump and it shows a clear advantage of Magma APS over a peristaltic pump.

The Magma APS is perfect for liquid transfer operations in production of vaccines where low shear sanitary/sterile pumping is required (e.g., cell transfer) or use of a tubing pump that can rupture and leak unexpectedly needs to be avoided (e.g., pumping hazardous materials or as an alternative to pressure vessel transfers when using process bags). Also, it will automatically shut down with built in safety features if the downstream over pressurizes.

The Magma APS in conjunction with a hollow fiber filter can create a bioreactor perfusion system. The hollow fiber filter retains the cells in the bioreactor and the Magma APS creates either cross flow or reverse cross flow (RXF) through the hollow fiber that inhibits debris from fouling the membrane filter surface. The diaphragm pump helps protect the cells to help maintain cell viability. The Magma APS control system can also be used for a pressure filter integrity test.

The Magma's advanced design and capability for flexible component integration also make it an excellent choice for laboratory scale research yet also suitable for production processes. The control system is designed for seamless integration with industry standard components for various applications. The interface is easy to use with either English or Metric units. The pumping range from the available sizes is from less than 0.2 l/min to over 13 l/min. Visit www.pendotech.com/products/magma.htm for detailed application information and video product demonstrations.

PendoTech is committed to providing value-added products and services to companies in the biopharmaceutical industry for enhanced production of mainly cell culture derived products. As the number of biologicals produced by cell culture increases and the industry matures, new technologies and process approaches are available for comparison to the existing ones for evaluation of enhanced production output and reduced the cost of goods. Visit www.pendotech.com for more information.

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