



FUEL CELLS

BULLETIN

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Plug Power to acquire Cellex, diversifies portfolio

US-based Plug Power has agreed to acquire Canadian firm Cellex Power Products, a leading developer of fuel cell power solutions for industrial vehicles. Plug will pay US\$45 million in cash for all of Cellex's outstanding shares; it expects to complete the acquisition in April. Plug says that it intends to continue Cellex's current operations in the Vancouver suburb of Richmond.

Since its inception in 1998, Cellex Power has been developing PEM fuel cell power units for electric forklift trucks, and is targeting the estimated \$1.5 billion industrial motive battery market. The company recently successfully completed beta testing of its hydrogen fuel cell power units in pallet trucks at two Wal-Mart distribution centers in Ohio [FCB, March 2007].

Cellex has focused its initial product initiatives on class 3 electric forklift trucks, often referred to as 'pallet trucks', which are the predominant equipment used to transport goods within large distribution centers. The company's product strategy has been to develop a full product portfolio addressing all three classes of electric forklift trucks, enabling

complete conversion of distribution centers and maximizing customer benefit.

Plug Power considers telecoms back-up and materials handling applications to be attractive near-term markets for PEM fuel cell power, and has selected these as central components of its revenue growth strategy. In addition, the two applications use complementary fuel cell technology and have similar electrical output requirements. Plug Power and Cellex Power expect to realize technology and operational synergies by leveraging the strengths of both organizations.

'With Plug Power, we anticipate accelerating the commercialization of our fuel cell solutions for the multi-billion-dollar electric lift truck market,' says Chris Reid, president/CEO of Cellex Power. 'Plug Power's strong balance sheet and established operational capabilities in manufacturing, supply-chain management and product testing, support and training will be critical to this effort.'

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USFCC releases fuel cell gasket guidance document

The US Fuel Cell Council has published guidelines for testing seal materials for fuel cells. The document recognizes the critical nature of reliable gaskets in the operation of fuel cell systems.

'As fuel cell manufacturers continue to improve system reliability, the importance of durable seals becomes more pronounced,' says Robert Wichert, USFCC's technical director. 'Use of this document will facilitate standard language pertaining to sealing systems (definitions, materials, and test methods). It is intended to enable successful material selection by addressing key performance metrics.'

The document, developed by the USFCC's Gasket Focus Group and free to download from its website, is a resource for anyone working with gasket design, specification and qualification.

The document covers the basics of gaskets, including definitions and chemistries, and outlines recommended testing practices for the qualification of sealing materials. The information and recommendations were assembled based on an extensive review of published test methods, as well as input from the USFCC membership.

The USFCC Gasket Focus Group was formed as a subset of the Materials & Components Working Group, to identify key characteristics and performance metrics of seals for PEMFC systems.

The Materials & Components Working Group is also currently exploring issues in corrosion, testing standards, reliability, material specifications, bipolar plates, membranes, GDLs and MEAs.

For more information, go to: www.usfcc.com

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