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**FOR IMMEDIATE RELEASE**

## **R2 Brings New Level of Safety to Formosa Plastic Chlor Alkali plant in Point Comfort, Texas**

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### **FOR IMMEDIATE RELEASE**

**Montreal, Canada – July 2010 - R2** has been awarded the contract to supply Formosa Plastic chlor alkali plant in Point Comfort, Texas with its new SIL 2 EMOS® Single Cell Voltage Monitoring System.

It is only through the precise measurement and analysis of the voltage-current-time relationship of every individual cell that the earliest possible detection of all probable electrolyser malfunctions can be achieved. Hazardous situations can therefore be avoided by enabling an emergency shutdown of the individual power supply preventing irreversible damage to equipment and/or personal injuries.

R2's most recent EMOS® product offering has been developed according to IEC61508 "*Functional safety of electrical/electronic/programmable electronic safety-related systems*". The patented modular design of EMOS® provides a Safety Integrity Level 2 (SIL2) as a stand-alone system. EMOS® has been designed to provide the most precise individual element voltage measurement available for electrolytic cells (+/-1.5mV). Hardwired interlock functions have been integrated into EMOS® in order to shut down an electrolyser, independent of the plant network and with a response time of less than 1 second, in case of the spontaneous malfunction of any individual cell (short circuit, membrane tear, blockage, etc..) The specialized alarm algorithms programmed in the EMOS® hardware have been developed based on an extensive HAZOP study using data from more than 30,000 cells monitored by EMOS® worldwide. EMOS® proprietary design also protects against consequential damages in case of slowly evolving malfunctions (insufficient electrolyte feed, failing temperature control etc..)

“R2 is committed to researching, developing and integrating state-of-the-art-technology to improve safety and optimize processes and outcomes,” said Gilles Tremblay, President and founder of R2. “The new SIL-2 EMOS® system is a major step forward in this pursuit, as it focuses in taking technology that until now has been used primarily to monitor data and transform it to knowledge in identifying, detecting and preventing all anomalies that can occur in a process”. EMOS® not only stores the data related to the voltage-current-time relationship for all individual cells, but also independently stores and synchronizes all other relevant operating parameters taken from the plant DCS. EMOS® comprehensive database gives a producer very valuable information and insight for further performance analyses, leading to improved preventive maintenance strategies and numerous options for additional process optimization.

*R2 specializes in the design, development and implementation of intelligent systems that are geared at industrial process optimization through precise performance and condition monitoring. Since its inception in 1989, R2 has always had a special dedication to the electrochemical industry and it holds extensive knowledge of, and experience in chlor-alkali and sodium chlorate production. For more information, consult our web site at: [www.r2000.com](http://www.r2000.com)*