Who Can Use UniChlor® Technology?
Optimal candidates for UniChlor® Technology will meet one or more of the criteria below.

- Use chlorine and caustic in quantities above 30 tons equivalent of chlorine per day.
- Use significant amounts of chlorine and caustic in sodium hypochlorite production or for internal consumption.
- Produce ferric chloride, calcium hypochlorite or other chlorine derivatives.
- Produce feed stocks for the manufacture of other chemicals.
- Produce sodium hydroxide and hydrochloric acid for distribution.

UniChlor® Technology a Profitable Alternative to Purchasing Chlor-Alkali Chemicals
UniChlor® Technology can provide significant economies that impact directly on the bottom line. The most obvious are discussed below:

Chlorine and Caustic are Produced for one-third the Cost of Purchase
It costs from two to three times as much to purchase chlorine and caustic as it does to make the same amount of chlorine and caustic using UniChlor® Technology. In the current market, the purchase price of an ECU could be as much as $800 to $1000. In contrast, the variable costs to produce the same amount of chlorine and caustic with UniChlor® Technology range from $250 to $325, depending on where in the US the plant is located.

Chlorine and Caustic Costs are Controlled
Since all production requirements of chlorine, caustic, and hydrochloric acid can be supplied with UniChlor® Technology, the long-term costs can be controlled. As a result of controlled costs, advantageous long-term customer contracts and competitive pricing can be negotiated and controlled.

Product is Higher Quality
The commodities produced by the UniChlor® Technology are of very high quality, since the best membrane cell technology available today is used in their production. Similarly, since chlorine and/or caustic are produced on-site, contamination or degradation of the chemicals during transportation is eliminated.
UniChlor® Technology Enhances Site Security and Safety
The use of UniChlor® Technology does not require that liquid chlorine be stored on-site. The plants use salt and electricity to produce caustic soda and chlorine gas. Downstream, the chlorine gas - either wet or optionally dry - can be reacted in a chemical process to produce bleach, other chlorine derivatives, or chemical feed stocks. As a result, use of liquid chlorine and related storage issues are eliminated. Likewise, compliance requirements for EPA and OSHA issues can be virtually eliminated.

How can I find out if UniChlor® Technology is Justified for My Site?
Powell and Uhdenora will be working closely with US customers to demonstrate the feasibility of UniChlor® Technology to produce sodium hypochlorite and chlorine-associated derivatives. As the initial steps in the process, Powell is assisting companies who are interested in a preliminary cost analysis, at no cost to the potential customer. In order for a cost flow analysis to be started, a simple secrecy agreement will be requested to protect the potential customer and Powell during information transfer. This agreement is intended to protect the customer by ensuring the confidentiality of the information provided to Powell for analysis. Likewise, it protects Powell relative to free transfer of spreadsheets and other information provided to the customer to analyze the feasibility of the project.

Customer commodity requirements are not necessary for cash flow analysis. To complete the initial cash flow analysis, Powell does not need to know production volumes of the chlorine, sodium hydroxide or hydrochloric acid to be produced by the proposed plant. Powell will provide a spreadsheet, along with budget numbers for power, salt and capital investment, to allow the customer to input these amounts and determine their own cash flow for the project.

How can I find out more about UniChlor® Technology?
Please contact Duane Powell, Brent Hardman, or Robert Bebow at Powell Fabrication & Manufacturing, Inc. Phone 888.800.2310 or e-mail dpowell@powellfab.com, bhardman@powellfab.com; rbebow@powellfab.com. Information about UniChlor® Technology and other Powell products is available on our website at www.powellfab.com.