International Erosion Control Systems

International Erosion Control Systems Inc. creates solutions for storm water management, erosion control issues and pre-cast structures, providing complete engineering, manufacturing and direct distribution of its product line.

Headquarters	22295 Hoskins Line, Rodney, Ontario, N0L 2C0
Year Established	1984
NAICS	-
Employees	72
Major Expansions	N/A
Exports	US, Mexico, Ecuador, Bolivia, Nigeria, Brunei, Peru, Argentina
Parent Company	International Erosion Control Systems Group
Other Locations	Western Canada Headquarters - Calgary, Humboldt

IECS provides solutions to many different types of erosion problems in countries around the world. IECS has developed expertise in manufacturing custom precast structures for client projects that would typically require the cast-in-place method. The firm is recognized for its welcoming approach to all types of new design challenges brought forward by customers, and its commitment to manufacturing high-quality solutions at competitive prices. The ability to offer complete engineering, manufacturing, and direct distribution of its product line is one of the main reasons IECS has become an industry leader in the design-build civil construction market. Located in Rodney, Ontario, adjacent to Highway 401, the company utilizes its location to facilitate efficient shipments (via delivery trucks) to customers.

IECS was founded in 1984 by its current president, Louis Arvai. The company began by pouring sidewalks and driveways before transitioning into small precast items such as patio stones and landscaping tools. Shortly after gaining experience with small precast items, IECS began manufacturing Cable Concrete, a precast erosion control mattress. Cable Concrete, helped the business grow in terms of sales, and expand into the heavy and civil and construction industries. IECS continued to innovate by developing a precast headwall (at a time when headwalls were traditionally poured into place), and then designed a retaining block wall. As the first company to manufacture and sell cable concrete, precast headwalls, and a retaining wall block, the firm quickly established itself as an innovative supplier in the construction industry. Louis was able to attract large contracts by continuously reinvesting profits back into the business; this allowed IECS to purchase more equipment and resources, and Louis could confidently tell potential clients that his

company was capable of providing what they needed. Over the past 30 years, Louis and his team have continued to manufacture unique precast solutions that companies in the prefabrication industry are unable to offer.

Customers appreciate the time and money that they save by using IECS products. For example, the company's LG Retaining System decreases standard installation time because it reduces the site preparation required. The required amount of labour for installation also decreases through the use of hydraulic equipment. On average, the LG Retaining System blocks are 40 per cent larger than blocks offered by the competition, which allows installation to be completed with fewer blocks. Additionally, the custom precast headwalls produced by IECS enable customers to install the headwalls easily with their own employees, rather than subcontracting to a cast-in-place company. On top of the time and money that IECS products save, the quality of these products is superior to cast-in-place alternatives. All of the products are manufactured indoors in a climate-controlled environment, which ensures the manufacturing conditions are optimal for production. Moreover, contractors do not have to worry about weather interruptions or other unforeseen circumstances delaying delivery of the product and affecting their scheduling.

IECS's Cable Concrete, has helped the company to expand on a global scale, with the product being exported to Mexico, Brunei, Peru, Argentina, Ecuador, Bolivia, and the United States. Cable Concrete is an articulating concrete block (ACB) system connected by cables, allowing each individual block to be flexible and form to the site terrain. The product increases stability, and eliminates movement more than a loose/non-connected system or loose rock that can be displaced. Perhaps the greatest benefit this product offers is its ability to stimulate local economies through job creation. IECS capitalizes on the simple production process of Cable Concrete by exporting the mold required to manufacture the product, but using local resources and labour to manufacture the product locally.

One of IECS's most recent Cable Concrete projects was in a small residential area located in a valley in Nigeria. The town required slope protection from eroding banks that were adjacent to the residential area. Cable Concrete was used to ensure long-term stabilization of the eroding banks. Decision makers from nearby residential areas have already begun visiting the job site to observe the capabilities of Cable Concrete.

IECS's ability to customize its products has enabled it to develop relationships with customers in various industries. The company has sold its products to infrastructural contractors, regional municipalities, conservation authorities, and engineering consulting firms. Additionally, IECS indirectly sells Cable Concrete as a solution to design engineers who outline the specifications for the product in their design. If the solution presented by the design engineer is chosen, then IECS will also receive a contract for the Cable Concrete specified. Regardless of how new or established customers are, IECS is committed to providing quality and service that will encourage them to become customers for life.

Louis recognizes the importance of treating employees with the same respect and service that customers enjoy. The work culture at IECS is very open and supportive, encouraging all employees to offer new and innovative ideas for future products. Greg Arvai, Ontario Sales Manager of IECS and Louis's son, emphasizes that when hiring employees, he is looking for people with good values and ethics—not just adequate education. With more than 70 current employees, IECS is the one of the largest employers in Rodney; Louis is proud of his company's role in offering local employment to area residents. IECS is also involved with the local community through its sponsorship of multiple community sports teams.

The company has effectively capitalized on government programs to help continue its successful global

expansion. IECS recently received funding from the CanExport program, which subsidized the cost of employees travelling to other countries and promoting the erosion solutions offered by IECS. Whether through presentations, trade shows, or "lunch-and-learn" sessions, Greg and his team are eager to spread awareness about IECS, both domestically and internationally. IECS also utilized a program from the Canadian Trade Commissioner Service to help market its products and solutions to foreign companies more efficiently. This program partners a domestic Canadian company with a foreign company that is paid by the Canadian government to assist with the logistics and business interactions of the Canadian company. IECS was able to meet with potential foreign customers more easily because its foreign partner company used its knowledge of the area and local businesses to provide IECS with comfortable arrangements and introductions to interested firms.

In addition, IECS uses Ontario Centres of Excellence (OCE) funding to conduct research and development projects at Western University and Fanshawe College. At Western University, the company uses three-dimensional software to simulate water flowing through Cable Concrete to develop a better understanding of the product; this makes future product development much easier because material resources are no longer required in the early development stages of new products. The simulation also saves money on current projects because IECS can simulate multiple variations of Cable Concrete in response to different parameters to determine the optimal design. A full-scale model of the product will be built for testing only after IECS believes the optimal design for the customer's project has been found.

Meanwhile, at Fanshawe College, researchers were able to take an existing program at IECS and update it to be cloud-based. The original program could only be used when manually installed by IECS staff on customers' computers, could not be accessed on mobile devices, and was unable to collect user data that could be sent back to IECS. Fanshawe College updated the capabilities of the program so that it is now easily accessible for customers, and they can observe all of the data stored and use it to forecast potential projects. The program allows customers to input the parameters associated with the project and then calculate the optimal block thickness required. Customers are able to design their product entirely on their own, and then have IECS review it prior to manufacturing the product. IECS will also receive data regarding which customers are using the program, allowing the company to focus on spreading awareness of this new program to customers that are not utilizing it.

One of the major challenges IECS is preparing to address is the difficulty of attracting skilled labour. Increasingly, educated young people are leaving Rodney to work in larger cities. To combat this trend, IECS has begun marketing a regular wage increase, and offering more employee interaction opportunities (such as company barbecues) and added health benefits. Louis believes that by making IECS an even better place to work, he will be able to attract the talented employees he needs to continue pursuing success.

Another potential challenge that IECS faces is additional competition entering the precast industry. Given that IECS is one of the innovative leaders in this booming industry, many of the new entrants are copying the firm's product ideas. However, IECS has already established its reputation as an industry leader and developed strong relationships with clients, so it does not view these replica products as a significant threat. Moreover, IECS's management believes the firm will always be the first to offer new types of erosion solutions since it prioritizes innovation.

Moving forward, IECS will attend trade shows, conferences, and presentations, as well as learn from suppliers about any new trends, to ensure it remains at the forefront of the industry. Greg recently visited Chile and Peru to spread awareness about the efficient solutions that IECS can provide for the flooding that has occurred in these countries. The company's recent expansion into four countries in Africa has also been

well received, so IECS is looking to continue its expansion by selling products in another six African countries. The firm will continue to monitor the impact of global erosion control issues and other storm-related problems for which the World Bank provides funding support. Louis and Greg follow these issues because they believe they can offer high-quality, long-term solutions to people in need. IECS's unique capabilities, can-do attitude, and customized solutions for each individual client will undoubtedly help the company to continue its rapid expansion and achieve sustainable success.