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Family First: The Story of CZM Foundation Equipment

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The following is a continuation in a series of articles about continuity of family ownership and leadership in ADSC member companies. Throughout 2016, we will be reporting on ADSC member companies with multiple generations of ownership and management. This article is about CZM Foundation Equipment and the family that built it. (Managing Editor)

Most family-owned businesses start with a business and slowly grow to include a family or families. Sometimes brothers, sisters, sons, and daughters are pressed into service with the company to help it survive. In other instances, family members drift into the family business as an almost inevitable life course.

For the Cló family, the heart of CZM Foundation Equipment, ADSC Associate Member of Belo Horizonte, Brazil, the story begins and ends with the family. The business is family-oriented, whether it be the Cló family or the CZM family; the family takes care of each other by maintaining a quality business.



Loris Cló building roads in Brazil (this was his first activity after immigrating) in 1956.

Loris Cló was a mechanic in Modena, Italy during World War II. He was a second generation mechanic, having worked in the shadow of his father, Eugenio, since he was ten years old. Eugenio was a well known mechanic, having been a leader in the effort to mechanize agricultural operations in Italy. Some of the best known names in machinery in the world, Ferrari, Lamborghini, and Maserati, are located in Modena and Loris worked for a time in the hallowed halls of the Maserati plant. After the war ended and because he could not get a visa to the United States he moved with his mother and brothers to the scenic hills of Belo Horizonte,

Brazil. He knew opportunities would be plentiful in Brazil, which at the time was a rapidly developing country. He also knew the move would bring him closer to the United States, where he was certain that great opportunities could be found.

Belo Horizonte is translated from Portuguese as “beautiful horizon” and can be found amidst the Espinhaco Mountains in southeast Brazil. This metropolitan community of over 5,000,000 began significant development in the 1890s and is the capital of the state of Minas Gerais. A significant portion of the population includes people of Italian and Portuguese

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descent. Much of the original economy of the region came from mining, beginning when the area was first settled in the early 18th century. But post-1890 development has included a wide variety of industrial interests. In addition, the city is home to some of the most significant architectural works and landscape architecture of southern Brazil. The Population Crisis Committee of the United Nations designated the city as having the best quality of life in Latin America.

Loris worked in a number of businesses when he arrived in Brazil, including for a contractor with large fleets of trucks and a heavy road contractor. He attempted several ventures himself, but none achieved the success that his mechanical ability and vision would suggest. He was well aware of the import policies which made it difficult for manufacturers outside the country to penetrate the Brazilian markets. Loris could see plenty of opportunities, he just had to find the right vehicle for his plans.

In the middle of his hard work and years of observing local construction markets, Loris had a rare chance for some time off at the movies. It was there he was lucky enough to meet Licy Teixeira. This force of nature, the youngest of 17 from a small community 2,000 miles away, had come to Belo Horizonte to study medicine. She became only the third female physician in the city and the first and only wife of Loris Cló. They married after dating for



Loris and Licy Cló with sons Dalvio age five and Marcos age three in Brazil - 1964.

CZM Foundation Equipment Savannah, Georgia



only six months. Both worked hard, but their work was now directed toward making a good life for the family that was on their own personal horizon. A son, Dalvio, was born first in 1958, and

Marcos followed in 1961. Ticiano, the third son, rounded out the family in 1962.



Loris Cló with sons Marcos in front, Dalvio in the background and Ticiano on the right side -1966.

In 1976, after years of testing business waters and accumulating a wealth of knowledge about construction equipment, Loris made the decision to begin CZM Foundation Equipment. At the time he was working for a company that rented cranes and crane attachments. His customers knew he was good with anything mechanical, so he had the start of a customer base. He also was current on the equipment needs in the construction markets. He could fix and adapt most equipment when it didn't work. His new company began supplying cranes and crane attachments to customers throughout the region.

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Unlike many family enterprises, CZM was never headquartered at the Cló home. However, the Cló family frequently hung out at the CZM headquarters. Loris liked to take the boys to the shop where they enjoyed seeing what was being created. Dalvio's mechanical ability emerged quickly, and while Marcos too had the family mechanical ability his interest was in marketing and administration. Ticiano never caught the fever for equipment, instead following in his mother's footsteps with an interest in

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A Bucyrus 22 B mechanical crane Loris Cló used to rent back in 1970.

medicine. Loris always put family first, and he began to expand his definition of family to include many of his new employees.

Loris continued to build and service cranes, as well as crane at-



Loris Cló looking at his first built drill rig in 1976.

tachments for auger cast pile construction, and his business became well established. He addressed the needs of the busy construction industry throughout Brazil, and he put a strong emphasis on service. He believed he could learn a lot about the needs of his customers and future customers by being very attentive to their service needs. He also capitalized on the closed economic structure of the country and slowly built a healthy, relevant company. Throughout this time, his intent was always to understand how equipment was used on a daily basis in order to refine it and give his customers better products.

Dalvio attended college at the Federal University of Minas Gerais. He majored in mechanical engineering to capitalize on his natural abilities and to pursue his passion for mechanical equipment. He also continued to work in the company shop during school. After graduation, Dalvio went to work for Mannesmann Demag, a German company manufacturing mining equipment in Brazil.

Marcos followed several years later when he attended the Catholic University of Minas Gerais, majoring in mechanical engineering, and also worked at the family business as he pursued his degree. Marcos experienced significant success when he developed software for the sales staff while working at Alcoa in the window division. He went on to market this software throughout Brazil, building a strong business and a good reputation.

The momentum of the company and the possibilities within the construction industry in Brazil eventually attracted Dalvio's interest, and he began exploring the somewhat untapped potential of the company, particularly the foundation drilling division. Dalvio began researching the state-of-the-art of foundation drilling in **Dalvio began researching the state-of-the-art of foundation drilling in other markets, and his research led him to early conversations with the ADSC, long before the company became active with the Association.**

other markets, and his research led him to early conversations with the ADSC, long before the company became active with the Association. He joined the company full time in 1986, where he began pursuing development of several of the foundation drilling equipment lines.

Equipment research and development is only one half of a successful business equation. Dalvio recognized that great equipment still needed to be marketed properly and well. He contacted his brother, Marcos, and urged him to return to the family business and lend his considerable marketing skills to their exciting new initiatives. Marcos returned to the company and brought with him new ways to "listen" to the customers.

Years of Loris' work had gone into the company to this point, and Marcos had been able to observe the value of a longterm investment. When he met Adriana, his lovely wife and a civil engineer, in school, he courted her for nine years before marrying, proving the power of patience and planning. His long lead time paid off with significant deliverables: Rafael, Renata, and Leonardo.

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Dalvio age nine standing, Marcos age six sitting, and Ticiano age four in the background - 1967. Their natural curiosity about big equipment had them checking it out.

Dalvio, too, knew his wife for many years before they married. Silvana had attended school with Ticiano, and Dalvio's ongoing enchantment with her led to their marriage and three children: Giuliano, Marcello, and Nathalia. The family growth only reinforced the commitment of the men to make the company succeed to provide stability for the family.

Dalvio immersed himself in developing new and better equipment to increase their market share throughout Brazil. Much of their foundation drilling equipment was excavator-mounted to reflect the needs and common practices of the Brazilian construction industry. But Dalvio came up with improvements based on exten-

sive interaction with field personnel who used their equipment on a daily basis. In particular, he invented a torque mechanism that made their continuous flight auger (CFA) equipment safer to operate. This innovation gained worldwide attention and helped to establish their company as a leader in South America.

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In 1993, CZM exhibited at ConExpo, where they made their first export sales from their booth on the floor. One rig was sent to Columbia, and one went to India. This would be the first time the



Dalvio manning the CZM booth at Conexpo in 1993. CZM's first international show!

Cló s put their toes in the waters of other markets, and they knew they wanted to expand the size of their swimming pool.

A natural next step in the evolution of the company was a move into the United States market. Since they were little boys Marcos and Dalvio had heard their dad speak about the opportunities in the United States. Several members of the family had participated in exchange programs to the U.S., and they were excited about finally working in the States. They shipped their first rig to the U.S. in 2000, but they wanted more of a presence than simply exporting equipment. They knew that eventually their path would lead to what Marcos calls "the most competitive market in the world," but timing was everything. They decided they wanted to manufacture in the U.S., but they did not want to "manufacture" by simply assembling Brazilian-made parts; they wanted to make American rigs from scratch. And they were aware that the needs of the U.S. market were different, so the equipment would need

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Loris supervising the manufacturing of the micropile model CR18 - 1994.

CZM Contd.



Dalvio and Marcos at CZM's first Bauma Expo, in Munchen, Germany in 1995.

to be designed differently. So Marcos and Dalvio did what Loris had been doing for years: they spent a long time just listening.

As the company was making its initial move into the U.S., Dalvio's son, Giuliano, was taking his place at the front of this effort. He attained a degree in mechanical engineering and worked for Fiat, ESAB and SMC, designing various pieces of machinery for their production facilities. In 2007 he joined CZM Brasil. In 2010, he began working in the project CZM USA. First on the design of the EK line, a dedicated line of Kelly Bar machines mounted on caterpillar bases, focused on the American market. Then developing suppliers and starting a production line for the first 10 EK125's. He became President of CZM USA and put all of his en-



Two new truck mounted models CD27 and a rubber mounted model CL07 ready for delivery to customers - 1996.

ergy into establishing a successful undertaking.

The Cló s spent several years traveling around the U.S., attending ADSC events, and talking to potential customers. They redesigned their Brazilian equipment to fit the needs of the U.S. market, and made the decision to put all of their drilling equipment on Caterpillar bases. Their philosophy was that Caterpillar had the largest presence in the U.S., therefore, servicing the general needs of the equipment bases would not be complicated by having to find a service dealer near a customer's jobsite.



Marcos, Dalvio and Marcello Cló at Bauma 2004 with a CFA machine.

The downturn in the U.S. economy in 2008 was not echoed in Brazil, so the Cló s took the opportunity to purchase property near Savannah, Georgia, to build a plant for CZM Foundation Equipment's U.S. operations. Giuliano hired three employees from the local area who all had one thing in common: experience with construction equipment, but they were not in the foundation drilling or foundation equipment business. The Cló s felt it was important to bring on employees who were familiar with the user side of the

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construction equipment business. Barrett Rahn was brought on as U.S. Sales Manager; Josh Brower became Operations Manager at the plant; and Jason Poole had the unenviable job of setting up new vendor relationships as Purchasing Manager. The three men also had another commonality: they all had strong family ties. All three soon became members of the CZM family and unofficial members of the Cló extended family.

Marcos and Dalvio alternately shepherded their new charges around to meetings with potential customers then left them alone to fend for themselves. They stressed repeatedly that the U.S. operation must be guided by feedback from customers who use CZM equipment, as well as equipment made by competitors. They did not want to change the service-driven company model that had been so successful in Brazil.

After many months of listening, in 2010 CZM began building

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Giuliano and Katia Cló in Savannah.

drill rigs in a temporary facility and subsequently produced their first Kelly Bar rig in 2011. They designed a line of drill rigs with large rotary components, believing that the larger scale translates into more durability and less down time. These standard mast rigs were followed by short mast conversion kits and other improvements after the permanent plant opened in 2012. Giuliano's stamp is on most of these innovations, and his experience as an operator has provided valuable insight as a complement to his engineering expertise.



Dalvio with his wife Silvana, daughter Nathalia, and sons Marcello and Giuliano.

Ongoing developments in the U.S. operations have been driven in part by needs of the transmission line construction industry, where much work takes place in extreme work environments. Low clearance is one of the most common problems on these projects, so CZM put a significant amount of effort into modifying its standard rigs to provide effective equipment to work in these situations.



Marcos and his family. Left to right, Marcos, Leonardo, Rafael, Renata and Adriana.

The quick success of CZM USA led to Giuliano's move to the Savannah area in 2013. He brought with him his new bride, Katia, who had worked in international finance with a mining concern in Brazil. Shortly after the move, she switched her focus to research and began PhD studies at Florida State University in strategic management.

The Savannah plant has grown to employ 35 people from the local workforce. And the Clós treat these employees like family,

Giuliano's stamp is on most of these innovations, and his experience as an operator has provided valuable insight as a complement to his engineering expertise.

often hosting family-inclusive events or taking the employees to an outing when production has been particularly high and workloads have been intense.

CZM reinforced its U.S. presence by becoming active in the ADSC, both on a chapter level and at national events. Their faces have become fixtures in Association activities for the past several years, providing input and contributions for industry advancement.

Production in Brazil has also continued to thrive, and CZM is the largest producer of foundation drilling equipment in South America. The facility certainly has grown from Loris' original operation in 1976, now employing over 180 people. Their emphasis continues to be on customer support and in responding to contractors' needs for specific types of projects.



Left to right: Marcos, Loris, Giuliano and Dalvio Cló at the CZM Factory in Belo, Brazil.

Sales in the U.S. have also grown, bringing in employees such as Sales Representatives Jon Elmore, Jim Close, Chas Raysik and Darrel Ledbetter. Jon said he is continually impressed by the integrity and caring attitude of the Cló family. He tells numerous stories of instances where the Cló s have taken an interest, not just in their employees, but in their employees' families. Barrett Rahn echoes these sentiments, and tells the story of the three enormous packages he and his wife received when they returned home from their honeymoon. The packages turned out to be gifts from the Cló s, including every item on their gift registry. Barrett was terribly grateful, but told Marcos that a person was only expected to give one gift from a registry, not the whole list. Marcos responded

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Left to right: Giuliano, Loris and Dalvio Clo' during Loris' first visit to the Savannah CZM facility.

by saying, "But isn't the fact that something was on the list mean that it was something you needed? We wanted to make sure you have everything you need."

The CZM network has been reinforced in recent years by a partnership with an Italian company who supplies parts for the drilling equipment. Bringing in this additional interest has allowed the Cló s to tap into knowledge of the foundation drilling market from yet another perspective.

While the CZM extended family grows every day, the Cló family remains at the heart of the business. In addition to Giuliano's involvement in the U.S. operation, Dalvio's son, Marcello, is Chief Financial Officer. Marcello worked in the United States at Ernst and Young before bringing his financial knowledge to the family business.

Despite the presence of many family members in the company, the Cló s have a policy against automatic entry into the business by family members. In fact, it is a requirement that every family member must work for an outside company before assuming any position with CZM. The Cló s believe this outside training reinforces the expertise base of the company when family members do eventually pursue careers at CZM.

The rest of the children are still in the formative stages of their careers. Nathalia is completing her MBA in Boston, where she lives with her husband. Marcos' children are not involved directly with the company, but they are never far from the activities of the family. Rafael is an industrial engineer living in Pittsburgh and works for the Heinz Corporation. Renata is completing a journalism degree in Brazil, and plans to continue her education in the United States, preferably near her family in Savannah, Georgia. Leonardo the youngest engineer in the family resides in Germany where he is participating in an exchange program as part of his college studies.

Loris now 93 still goes into the office once a week, providing input on the development of new equipment and guidance on the direction of the company and the family. He and Dalvio have spirited discussions; and from their disparate points of view, innovation emerges. Giuliano joins in their discussions at every opportunity and all agree that good service should always be the primary goal of the company. Marcos continues to oversee all of the marketing, plotting a course for the vehicle that carries the destiny of the family and the extended family. At hand is a constant evaluation of the value of distant markets and a concentration on maintaining the quality and relevance that have created the position CZM occupies today.

Although the goals of the company include developing new equipment, most discussions about the future of CZM ultimately lead to talk of the family. Marcos strongly believes that he and



Giuliano and Dalvio in November of 2015 after testing the EK200 CFA Model. Giuliano thoroughly tests the new rigs.

Dalvio has a responsibility to teach their children (and inevitable grandchildren) to be responsible stewards of the company that has supported them for so long. He knows that even those Cló s not directly involved in the company should be trained to be good shareholders. The effectiveness of the company to provide quality products and service for its customers, and the ability of the business to support the whole CZM family, will always depend on maintaining a strong core.

Such is their sense of family that Marcos and Dalvio are quick to brag about their brother, although he has never worked with the company. Ticiano has become one of the most skilled and sought-after plastic surgeons in Brazil; Marcos laughed that he might not even be important enough to get in to see his brother. Ticiano also is an accomplished artist, sculpting, painting and playing the piano.

Regardless of which members of the Clo family continue to be involved with the business, they will strive to maintain the quality of their products in order to support their customers, and the entire CZM family will prosper.

According to Marcos, Italians have a strong sense of family, and the Cló s have taken care of theirs by using their natural affinity for all things mechanical to produce quality foundation drilling equipment. Regardless of which members of the Cló family continue to be involved with the business, they will strive to maintain the quality of their products in order to support their customers, and the entire CZM family will prosper.

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