Meeting market demands

by ICR Research

Since its first appearance in the late 1980s, Spain-based Cemengal has transformed its valuable experience gained in the cement industry into innovative grinding solutions. For 2015 the company has its eyes firmly fixed on Africa and Latin America where it expects to successfully meet market requirements and grow its business further. ICR speaks with Cemengal's managing director, Dario Del Frate, about past achievements and future objectives.

Dario Del Frate, managing director of Cemengal, looks forward to increased market penetration and launching newly-developed grinding units

ICR: Since its first steps in 1988, Cemengal has consistently expanded its reach. What specific milestones do you see as key to this development? How did Cemengal become active in the cement sector?

Dario Del Frate (DDF): For more than two decades, Spain had been the ideal environment to grow a company like Cemengal. The relentless urban development and subsequent growing concrete demand helped cement-related companies to thrive.

Cemengal was born as an erection company and top-class machinery agent, offering its services mainly in the area of Madrid. By the 1990s, it was working for all major cement groups throughout Spain.

As the company matured, it shifted from pure erection work to revamping and upgrades, on both pyroprocessing and grinding sections. Modifications can be tricky, as they require good engineering skills and the determination to 'get your hands dirty'. Accordingly, the company developed an internal design department nurtured by experience gained in the field and as a result, expanding its knowledge of the production process.

Cemengal's business model was already changing and with the advent of private clinker importers we leaped forward: our first complete grinding plant was commissioned in 1994 for the Spanish group La Union. Thereafter, many other installations followed.

The global financial crisis and ensuing recession in Europe and North America offered new opportunities for the company as it developed new grinding solutions to meet customer demands in a period of financial downturn

By the beginning of 2000 Cemengal had shifted from a localised erection company to one of the most successful Spanish EPC contractors.

The second and possibly biggest step forward occurred in summer 2006 thanks to Lafarge. As a long-time established client, Lafarge appreciated the quality of Cemengal's Spanish installations and trusted the company with grinding unit projects at its Saint Pierre La Cour (Paris, France) and Tangier (Morocco) plants. Tanger BK6 notably was carried out on a full turnkey basis, including civil works.

In addition, a year later, Holcim awarded Cemengal the contract for the grinding plants at Chekka, Lebanon, effectively

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Cemengal's Plug&Grind units have been delivered to cement plants in Latin America

launching Cemengal's ongoing expansion process within the space of a year. When I joined Cemengal in November 2005, 14 employees worked on Spain-based projects. Today, we count over 80 professionals, offering our services worldwide.

ICR: Cemengal has consistently increased its turnover since 2009, nearly tripling it over the past five years. To what do you attribute this success and how does Cemengal differentiate itself from other companies?

DDF: In my personal opinion, Cemengal's success through the years is based on our humble approach to work and our deep respect for our clients.

The people who worked with us can confirm that we really are committed to satisfy their needs and to establish a partnership above the mere supplier-client relation. We never went and never will go for a "one-shot" project. It is not in our DNA.

Consistent quality, total flexibility and very competitive prices complete the picture.

Responding to global challenges

ICR: The global financial crisis and ensuing recession in Europe and North America have changed the face of the cement industry, causing many producers and suppliers to rethink their operating strategies. How has Cemengal responded to these challenges?

DDF: Cemengal was indeed hit by the global recession. Fortunately we recovered very fast, even faster than I expected.

In the short term, we decided to implement an aggressive expansion strategy, with an increase in volumes and a decrease in margins. It was the only way to survive a period when the world, for our business, literally stopped turning.

In the medium- to long term we clearly saw the need to find a 'constructive' answer to the crisis and that's when the idea of the Plug&Grind system was born.

Product development

ICR: How did the Plug&Grind grinding concept emerge? Where has it been most successful and why?

DDF: The Plug&Grind is indeed Cemengal's answer to the global financial crisis.

Through the last five years, capex scarcity and risk mitigation have become the compulsory standard when assessing a project's feasibility. Yet, markets move quicker than ever, and opportunities rise and fall fast.

We had to find a solution which could allow our clients to seize them while avoiding the constraints imposed by the financial downturn.

I believe that the excellent market response to our Plug&Grind proves our product was indeed that solution our clients were waiting for.

I believe the success of the Plug&Grind, in a nutshell, is based on a few key elements which provide competitive advantages to their owners:

- its modular structure, which eliminates almost completely all erection risks. The Plug&Grind is a "no headache" solution for our clients
- its simplicity combined with a high-quality and robust manufacture, which allows top-class availability
- the reduced overall capex required.

In addition, the Plug&Grind offers today the quickest 'first cement' around. Time to market is paramount these days: the Plug&Grind is delivered FOB in seven months, and erected and commissioned on site in less than six weeks.

While overall production is small, the KPIs of such a plant are hard to beat. To date 12 Plug&Grind units have been sold worldwide and I am proud to announce that Lafarge is the first of the big players to purchase one.

In terms of geographical segments, the majority of sales are concentrated in Africa, the market the Plug&Grind was basically designed for. Latin America is also responding well.

ICR: How do you intend to extend the geographical range of your Plug&Grind grinding equipment? Have you considered mounting this equipment on vessels to create mobile plants?

DDF: Sales are expanding. Let us keep in mind that the product was launched in summer 2013 and that introducing a 'new concept' takes time.

Moreover, the Plug&Grind is already mobile. It can be dismantled and moved to another site in four weeks. As part of the risk mitigation strategy pursued by Cemengal, all parts are designed to be reused, apart from the civil works.

ICR: You recently introduced your new Plug&Grind XL to the market. What was the market's initial reception and what are your expectations?

DDF: The P&G XL is the logical extension of the modular concept to a bigger scale so it provides the same competitive advantages. Most containers remain of a standard size and only four are oversized. A police escort during transport is therefore not required. The XL version offers 220,000tpa, which is more than twice the Plug&Grind production.

The market's initial reception has surpassed our expectations and three units have already been sold. In the medium term, we believe the XL will have a broader market base, even if the products are complementary rather than competing.The Plug&Grind is clearly designed for niche markets or for clients who simply wish to start selling quickly. The XL is a small plant but approaches the size of more standard facilities, with all the advantages of a Plug&Grind.

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Sustainable development

ICR: What role does sustainable development play in your company's approach to business? What impact does the need for sustainable cement production have on your product development?

DDF: Cemengal has always been committed to sustainable development. I personally have a background in industrial waste combustion where environmental protection is paramount.

All our projects and products implement the latest technologies to always push the limit forward. The Plug&Grind is no exception and in spite of its small dimensions it comprises all systems to guarantee a safe use both for its operators and the environment.

Moreover, the Plug&Grind is completely water free, like most of our standard plants. This is a great advantage both in terms of use and sustainable production.

Finally, the units are not 'invasive' as they require very light civil works.

Major projects

ICR: What can you tell us about the current status of the grinding project for Cement Australia's Port Kembla plant?

DDF: Port Kembla has been a great success and represents a milestone which will be remembered in and outside Cemengal, as it is the first modular grinding plant in the world.

Cement Australia awarded Cemengal the complete 300tph grinding station on a semi-turnkey basis, excluding civil works execution and local assembly.

The project comes with dedusting hoppers for ships unloading at the jetty, innovative 90,000t dust-free raw material storage, feeding section, GPSE MVR 6000 C6 mill and seven steel cement storage silos.

The modular plant consists of tens of completely pre-erected 200t plant sub-units of 20 x 20 x 20m. Large parts of the buildings were constructed in Spain. From the main steel structure to the compressed air network – all were shipped to Australia, where the modules were finally assembled like Lego® bricks. This solution, proposed by Cemengal, enabled the reduction of capital expenditure when compared with local project execution and effectively, made the project possible.

Due to the complexity of the modules, the fact that they had to withstand 45 days at sea and that some buildings had to be stowed sideways while they would be standing in their final installation, it represented the biggest engineering challenge Cemengal has ever faced.

The plant is now running smoothly, the production tests are completed to the satisfaction of Cement Australia. We are all very proud of the outcome.

ICR: How is work progressing on the grinding section of Holcim's new Barroso plant in Brazil?

DDF: Our project for Holcim, Phoenix Barroso, is advancing well. I normally tell people who do not know Cemengal that we can offer them the smallest grinding plant around, the Plug&Grind, but also the biggest in the world. Barroso will produce more than 400tph based on a 12MW GPSE MVR 6700 C6 grinding mill.

Cemengal was awarded the project on EP basis. Construction is now in its end stages.

Outlook

ICR: Which are the key trends developing in today's grinding market?

DDF: In the next few years, Cemengal expects the grinding market to show an interesting period of growth, both in the emerging markets and in more mature economies that are sensitive to CO_2 emission issues.

While vertical mills are likely to be the solution for large plants in developed countries, ball mills are still very popular for smaller production runs and emerging markets. Nevertheless, some clients prefer ball mills over vertical counterparts in spite of its disadvantages. For example, we are now installing our biggest ball mill to date – a 5000kW, 150tph unit – in Kuwait.

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ICR: How does Cemengal expect to expand its business in 2015?

DDF: We are committed to continuing our geographical expansion through Africa and Latin America, and are very excited about opening new business lines. A Plug&Grind for coal is going to be launched in 1Q15, further to the many requests we received, especially from clients operating in northern Africa. We are also working on more modular products, which will be disclosed by summer 2015.

ICR: Which markets are you keen to enter and why? Do you expect most of your business to originate from emerging markets going forward, and if so, which regions?

DDF: As mentioned, we will continue our penetration of the sub-Saharan African countries. We firmly believe that is "the" market for us in the coming years. The Plug&Grind offers a perfect match with market requirements and allows us to grasp the extraordinary opportunities these countries can offer.

On the other hand, we are also committed to actively target North America, where we see great potential for small-scale grinding units as an alternative to terminals.

The modular nature of the Plug&Grind units allow for the assembly of tailor-made grinding plants

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