

Spanish market for gypsum plasterboard captured quickly in a joint effort

Grenzebach provides comprehensive support and assistance to Spanish gypsum and plaster specialist Escayescos in building a production line for high-grade gypsum plasterboard – Maximum economy and energy efficiency from the start.

Founded back in 1969, the Spanish company Escayescos S.L. has been active in the gypsum industry for half a century now. Assisted by Grenzebach, the company has now successfully added gypsum plasterboard to its product range. The Grenzebach specialists supported Escayescos in many ways, from analysing the infrastructure to integrating the plasterboard line into the existing environment, doing laboratory analyses of the raw material and establishing contacts with other manufacturers. They even brought in their experience when it came to presenting the project to the banks. From the start Grenzebach was involved in the board line project and completed everything within a very short time frame.

Escayescos has been processing natural gypsum from its own mine into stucco for decades. The stucco is processed further into special plasters and ceiling tiles. In view of good market opportunities for gypsum plasterboard, the company began considering building its own board production line. Further questions quickly emerged from that.

Passion for plant integration

"How much space do we need for the various plant sections? What capacity can the plant have? How can we develop recipes and ensure a high finished product quality? It was clear from the start that we wanted to have the best available technology, and that comes from Grenzebach," says Jorge Pelaez Panadero, CEO at Escayescos S.L., located in Alcaudete. Finding answers to these questions is the passion of the Grenzebach experts. "Working with a customer who has lots of experience in the gypsum industry and wants to integrate new technologies into existing buildings is of course always a very special challenge," says Christian Gärtner, Sales Manager Gypsum Technology at Grenzebach in Bad Hersfeld. Escayescos and Grenzebach developed concepts together on site and planned the integration of the new equipment. The company's first production line for gypsum plasterboard was built, set idyllically among olive groves.

Linking the board line and calcining plant

As an experienced producer, Escayescos already had a calcining facility but that is needed to make special plasters. The Grenzebach specialists examined the buildings and space situation on site and found that the new calcining Grenzebach Maschinenbau GmbH

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system would have to be set up inside an existing building. Dealing with the distance between calcining facility and board line was an essential core task. Gärtner explains, "We have bridged the distance with a pneumatic conveying system that supplies the stucco from the calcining building to the silo in the board line, which is located in a different building."

Raw material and recipes

How must the natural gypsum from Escayescos' own mine be handled for plasterboard production? Grenzebach analysed the natural gypsum from southern Spain at its laboratory in Bad Hersfeld in the German state of Hesse. "The raw material is of a very high quality – which is the basis for producing high-grade gypsum plasterboard," says Christian Gärtner. The board recipes were developed on the basis of the Grenzebach analyses. The Spanish company benefits from Grenzebach's excellent network in the gypsum industry when it comes to exchanging information on raw materials and production processes at a high level of expertise. The Grenzebach team also advised Escayescos on the selection and procurement of additives, such as chemicals, and paper. The board line's preparing station, where the additives are metered, mixed and fed to the production process in accordance with the different recipes, was designed to meet the corresponding requirements.

A high level of trust

"From the outset we have established a profound mutual trust with the customer. That is of course a solid foundation for a good mutual cooperation," underlines Gärtner from Grenzebach. The specialists in the supply of complete production lines also assisted Escayescos in matters of financing and with the planning permission procedures and coordination with the building contractor. "Right from the start Escayescos and Grenzebach have cooperated closely and as partners. We have always felt fully supported and above all very well informed and encouraged to proceed with our project," stresses Jorge Pelaez Panadero.

Quick start-up, high efficiency

Making the return on investment transparent from the start was also a key aspect for Grenzebach. In order to achieve a high efficiency from the beginning, Grenzebach committed itself to a very short installation and commissioning period. Christian Gärtner: "It is important to us that our customers can run the plant on their own as quickly as possible. That is why in-depth training on site took place already during installation and commissioning. That enabled Escayescos to produce top quality right from the start." Moreover, after take-over of the plant by the customer, Grenzebach's service is available at any time – whether continuous quality control in production is an issue or other questions need to be answered.



Keeping a firm eye on energy efficiency

A "green thread" running through the work of the Grenzebach specialists is the energy efficiency of the plant. The calcining system and the board dryer are heated with natural gas and consume as little energy as possible. The intelligent dryer control system keeps emissions at low levels.

Successful market entry

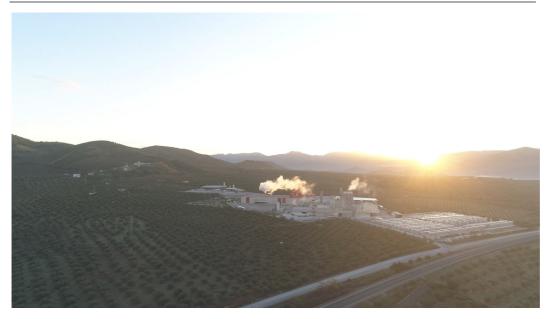
Thanks to the collaboration, Escayescos was able to successfully place the newly developed products on the Spanish market and meet its targets. "Our plasterboard has only been on sale on the Spanish market for five months but is already considered to be among the best," says a pleased Jorge Pelaez Panadero. "All this has only become possible due to the cooperation between Escayescos and Grenzebach. I would do it again any time. I would build another gypsum plasterboard plant – together with Grenzebach."

More than 100 plant supplied worldwide

From pneumatic conveying from the calcining system to the preparing station in the plasterboard plant, from the setting line up to the dryer, stacking line and packaging station, the entire infrastructure is optimally designed to suit Escayescos' demand and production schedules. The production line that has found a place in southern Spain, on the premises among olive groves, is one of more than 100 complete plants Grenzebach has supplied to the gypsum industry so far. The Grenzebach technology covers the entire production process in the gypsum industry; whether processing of natural and synthetic gypsum for the production of stucco and high-burnt plaster or further processing into gypsum board, gypsum blocks or gypsum plaster. The portfolio ranges from the installation of individual pieces of equipment up to planning and building turn-key plants.







The gypsum plasterboard plant was built at the location of the Escayescos headquarters in Alcaudete in southern Spain, set idyllically among olive groves.

Source: Grenzebach



Focus on the dryer: The intelligent dryer control system provides for maximum energy efficiency and keeps emissions at low levels.

Source: Grenzebach





Non-stop production: In order to achieve a high efficiency from the beginning, Grenzebach commit-ted itself to very a short installation and commissioning period.

Source: Grenzebach



Jorge Pelaez Panadero (Escayescos), right, and Christian Gärtner (Grenzebach) can look with pride at what they achieved together: After only five months on the Spanish market this gypsum plasterboard has earned itself a name as one of the best products.

Source: Grenzebach





Grenzebach is a world-wide leader specializing in the automation of industrial production lines. By providing services encompassing the entire life cycle of a project, Grenzebach's tailor-made automation solutions have a positive impact globally in glass and building material manufacturing as well as intralogistics. Many years of experience, continuous development, and sustainable support services are what makes Grenzebach one of the most preferred partners world-wide. 3000 installed lines in 55 countries prove that the Grenzebach name stands for quality and reliability. Amazingly, 90 percent of Grenzebach's products are for export which reflects that the medium sized family-owned company from Hamlar is a global player in the industrial automation.