

MCT Italy S.r.l., 06084 Bettona, Italy

On site mobile batch plant for the South Korean precast market

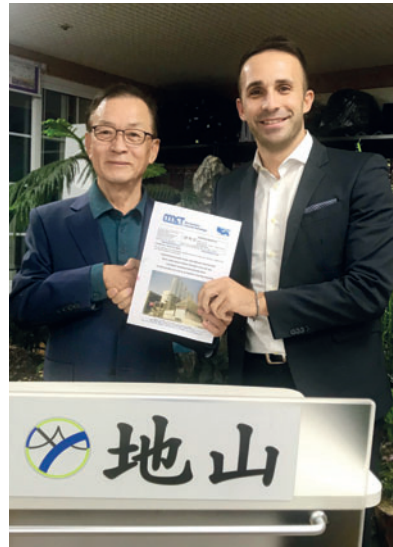
The growth of the construction market and the desire to make improvements in the quality of construction are pushing South Korean companies to use new technologies, in particular, in the production of precast elements. One of these companies is Jisan Engineering Co. Ltd, which has just launched a new mobile precast plant capable of producing high quality concrete elements for the construction of industrial buildings directly on site.

Jisan is one of the fastest growing South Korean precast companies with highly skilled engineers able to provide turnkey solutions: planning, designing, production and installation in a very competitive way thanks to the wide use of precast elements.

The owner and founder of Jisan Engineering Co. Ltd, Han JuSik, has developed a very long experience in construction business and nowadays his team of engineers can provide valuable solutions in various branches of the construction industry, both in civil and industrial sectors even if the real core business is warehouse and logistic facilities construction.

Project Overview

Due to the very strict regulation and weekend working restrictions on South Korean construction sites, the intention of Jisan Engineering Co. Ltd was to develop precast production directly on site, where the building is erected.



From left to right: Han JuSik, Jisan Co. Ltd, Chairman, and Gabriele Falchetti, MCT Italy S.r.l., South Korea Sales Director.

A MCT mobile plant was selected as right solution in order to guarantee high a production rate, save costs connected to transport/production time, and it also meets all the local environmental laws.

The first project the plant has been used for is the NAMSA ice logistic terminal built in Cheoinseong-ro, Namsa-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, South Korea. This massive building, fully built with precast elements, covers an area of 261,800 m² and is composed of five floors.

MCT Italy batch plant during installation



Best supplier for top solution

In this specific case the choice was the mobile MCT batching plant, model MCM.100. The main structure of this plant is composed of two 8 ft x 40 ft containers, which means it can easily be transported by truck, ship or train from one site to another and it is extremely easy to assemble. Transportation, installation and commissioning can all be carried out by the customer's existing crew without the need for foundations, plumbing or electrical connections. The plant is assembled using pinned connections with no need for bolts and nuts – that is what MCT calls its “zero nuts and bolt” design. The two containers are connected to each other by four tapered pins positioned at the corners of the lower module, which are inserted and connected to the upper one, providing stability to the entire structure.

Two horizontal cement silos for a total storage of 120 tonnes complete the mobile set up: they don't require any type of foundation or ground work to be installed and the erection phase takes place in a few hours.



MCT Italy horizontal cement silo

The electrical and hydraulic connections are installed and tested in the factory with the aim of guaranteeing maximum reliability of the whole system; the customer's assembly crew must therefore only connect the industrial plugs (these plugs are all different from each other, thus making any type of incorrect connection impossible) from the motors to the control panel when the system is installed.

Managing the plant automation and supervision is the most technologically advanced part of the system and it makes the entire working of the structure basic: the mixing takes place in a very short time and the system for weighing aggregates and cement is very precise.

The concrete output reaches 100 m³/h in the peak hours and a twin shaft mixer 3,750/2,500 litres guarantees a very high-quality mixing phase.

MCT Italy plant overview



MCT Italy shapes Jisan's dreams

"The changes in the world did not remain unnoticed by Jisan", Han ByungMin, Jisan's General Manager, explains. He continues: "The business plans regarding the new precast production were updated to correspond with the new market outlook."

Strong partner for long-term cooperation MCT Italy, through the local support of Eui Rock Oh from Hanin corporation, has worked closely together with Jisan Engineering Co. Ltd throughout the project, offering consultation and advices regarding all aspects in the construction of a completely new facility and establishing of an organization in a new market area. "When you are choosing a supplier for new precast

equipment, it is essential to choose a strong, experienced company with a specialized organization for continuous co-operation. After negotiations with MCT Italy had reached full speed, and our technical and consultant engineers supported us in comparing different suppliers, the contract was prepared in a very short time," adds Han ByungMin.

"We got excellent feedback from MCT Italy regarding the business environment. They supported our team with prompt feedback and very good attitude. Despite the language barriers, the erection, start up and commissioning of the plant was extremely fast and easy. The MCT Italy automation is also running in Korean language and this was extremely appreciated by our plant operators," says Kim HyeongSeok, Jisan Factory Manager.



Namsa Cold Storage - first project of Jisan Engineering Co. Ltd

Jisan Engineering believes in long-lasting partnership

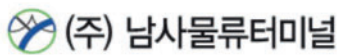
MCT Italy's South Korea Sales Director Gabriele Falchetti says that over the years MCT has delivered several plants to South Korea. This is the second delivery to Jisan Engineering, a precast concrete manufacturer with a previous focus only on construction sites.

During the past years South Korea has gone through changes that have had a boosting effect on the construction industry as the new leaders tackle the nation's problems. "Precast technology, especially the utilization of industrial elements, is on the rise in the country. MCT was chosen by Jisan Engineering due to the proven technology and positive experiences on the previous production line," Falchetti says.

An undoubted added value to MCT Italy's presence in the country is the MCT local team: "Our professional network can provide professional support, experience and real time assistance throughout the whole plant's lifetime," Eui Rock Oh from the MCT local team adds.

Soon after the start of production the interest in the South Korean market grew and Jisan Engineering Co. Ltd made its plans come reality, deciding to make the next step by investing into a fully automated system for walls and hollow core slab production. ■

FURTHER INFORMATION



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