

Elematic, 37801 Akaa, Finland

## Working together to make buildings safer in the world's most earthquake-prone zone

Increasingly, precast structures are used to make residential and commercial buildings stronger and more capable of carrying the unexpected loads of seismic instability. Compared with conventional building methods, precast also offers the most economical solution for any high-rise building or project with lots of repetition.

■ Tuija Aro, Finland ■

DDT Konstruct Inc in the Philippines is a dynamic construction corporation using the latest precast technology. The company started out as a modest sub-contractor and has gradually worked their way in 12 years to become an AAA Contractor. During these years of growth, they never lost focus of their corporate strategy of partnering with their clients, professionals in the construction industry, sub-contractors, and suppliers as well. DDT endeavors to share knowledge as a means of giving back to the industry that provided them a niche in construction.

Today, DDT is growing together with Elematic and the two companies are working to develop precast construction in the Philippines.

"It all started out in 2010, when Mr. Leo Buenaventura, working at our representative company in the Philippines, Riekermann Philippines Inc, contacted DDT", says Mr. Ari Mellanen, Sales Director, Asia, at Elematic. "The discussions quickly reached a stage where offers were made, and



*Acotec-Line at DDT with automatic precuring storage*

already in the autumn of 2011, a contract was reached to build a modern, highly automated precast production facility."

The factory was built during 2012, and later that same year production was already in full swing. "Mr. Danilo D. Tamayo,

President and Chairman of the Board at DDT, was actively involved in the negotiations and we were proud to wish him welcome to Finland to visit similar production facilities", Mellanen continues.



*Comcaster casting machine at DDT*



*Precast facade panels at tilting station*



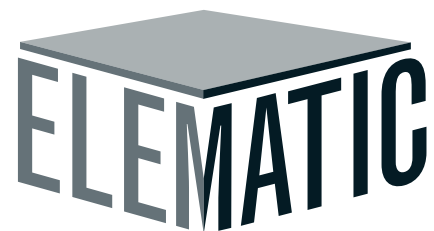
*Acotec-wall installation*

### Circulating line and Acotec-line with full automation

The result of the negotiations was in fact two contracts. The first was a circulating line with twenty-four tables of 3.5 x 13 meters for structural wall production. The delivery consisted of a Batching and Mixing Plant, a concrete delivery system, a circulating line with a Comcaster casting machine, a plotting station, and an automated concrete transport system, and a precast wall panel transport system for storage. All highly automated.



A SMART  
MATCH  
FOR EVERY  
PRECAST NEED



SMART EVOLUTION



*In the picture from the left are: Leo Buenaventura - Rieckermann, Rami Lendoza - DDT, Mrs. Cynthia Tamayo - DDT, Mr. Danilo Tamayo - DDT's CEO, Leo Sandqvist - Elematic CEO at that time, Mr. Petri Vesa - Sales director of Elematic, Juha Tuomola - Elematic.*

Currently, Elematic is making an expansion plan for both production lines because of the increased demand for the manufactured products.

The second contract consisted of an Acotec wall panel factory with a capacity of over 200,000 m<sup>2</sup> annually, producing non-load-bearing wall panels that are 600 mm wide and cut to room height. Available thicknesses are 75 mm, 100 mm, 120 mm, and 140 mm. The Acotec factory has its own B & M Plant, an automated storage system, and fully automated production. The end products are used as partition walls for condominiums, apartment buildings, and other housing units as well as for commercial buildings.

Construction is booming in the Philippines, and the lack of professionals in the building business is accelerating the growth of precast concrete products. Currently, DDT is using the products they manufacture only for their own development due to insufficient capacity.

### Excellent strength and economy with precast wall structures

Acotec wall panels are replacing conventional clay brick walls in Philippines as in many other countries. The installation is dry, only a skim coat and no plastering is needed, and overall, the installation of Acotec is six times faster than laying bricks. Excellent as partition walls in all kinds of buildings, Acotec-walls are light, economical, safe, moisture resistant, sound and fire proof as well as fully recyclable. In addition, the wall hollows work as natural conduits for electrical wires and other piping - another place to save in costs and manpower.


The Philippines is considered to be one of the most earthquake-prone countries of the world. This can be attributed to the fact that

it lies along the Circum-Pacific Seismic Belt where most of the seismic activities are concentrated. In the past, frequent earthquakes have occurred in the area, some of which have caused widespread destruction. Increasingly, precast structures are used to make residential and commercial buildings stronger and capable of carrying the unexpected loads of seismic instability. Compared with conventional building methods, precast also offers the most economical solution for any high-rise building or project with lots of repetition.


DDT Konstrakt Inc is a service oriented organization, giving the utmost importance to client satisfaction by continually improving the means of delivering projects in the safest way possible, with the highest quality attainable, and at a reasonable cost.

Elematic offers Smart Evolution as a customer guarantee. This means improving operations and offering to develop the business of customers in a smart way, providing everything from a single precast machine to complete production plants, supplying the most advanced technology e.g. for seismic and hot and cold zones.

Excelling in their respective business areas, DDT Konstrakt and Elematic are working together to develop precast construction in the Philippines. ■



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