ORION



CUSTOMER SUCCESS STORY

End-to-end digital control of precast fabrication and installation

+20%
FASTER PRODUCTION

~30%
REDUCTION IN SURVEYING MANPOWER

17
PEAK SEGMENTS/DAY (VS. 5–8 PREVIOUSLY)

PROJECT	BUDGET	YEAR	CUSTOMER
Malolos-Clark railway project & NSCR Southline	€480.000.000,00	2020 – Ongoing	Acciona & Daelim

LOCATION	PROJECT TYPE	SCOPE	SOLUTION
Philippines (Southeast Asia)	Bridges and structures	Design, fabrication, and installation of precast segments	End-to-end digital control (fabrication + installation)

THE CHALLENGE

Limited control and heavy dependencies

Acciona and Daelim lacked control over precast segment fabrication and geometric validation. Reliance on subcontracted technology and external providers had caused recurring delays and quality issues, while Excel tracking and manual surveying slowed production, raised labour needs and increased the risk of error.

"When you don't own the information, you lose control of the process."

A STRATEGIC SHIFT

Taking back ownership

They moved to a self-performing model: own the full process, eliminate third-party dependency and unlock higher productivity and quality, with a fully integrated digital solution from fabrication to on-site installation.

> *"The self-performing strategy is key. After our experience in Dubai, we doubled down on it. Internally controlled precast is a real added value for Acciona—now and in the future."*
>
> Ramón de la Fuente Huertas

THE SOLUTION

A fully integrated digital workflow

End-to-end digital control combining real-time geometric validation with centralized data management. Technical office and site teams work in a single, reliable environment, so issues are detected, understood and resolved as they occur.

> *"Having our own software gives us full transparency. You know which errors are real and can improve the system quickly."*

IMPLEMENTATION

Built for the field, with the field

A collaborative, iterative approach across civil works, surveying, technical office and innovation teams, continuously tested and adapted to real operational needs. The priority: a tool that works seamlessly on site, not just in theory.

THE TRANSFORMATION

From fragmentation to full control

Disconnected tools and reactive corrections gave way to real-time control of fabrication and installation, with centralized, accessible and reliable data for better decisions and smoother coordination.

> *"Managing your own data is critical. The improvement in productivity, quality, and control is enormous when you own the process end to end."*

THE IMPACT

Efficiency, quality, and confidence at scale

Higher productivity and quality, and far fewer risks from errors and delays. Integrating fabrication and installation eliminated manual data handling and complex reporting.

> *"Without this system, installation would require handling hundreds of Excel sheets—with a huge risk of error. Having everything integrated makes all the difference."*
>
> Héctor Faundez Velasco

LOOKING AHEAD

Towards full traceability and integration

A new installation control module is in its final stages, connecting fabrication and on-site execution. The long-term vision is a unified platform for site teams, headquarters, engineering and clients, with full traceability across the project lifecycle.

IMPACT AT A GLANCE

PEAK PRODUCTION

17 segments/day (vs. 5–8 previously)

TOTAL OUTPUT

~6,600 segments over 3.5 years. Second project: ~3,000 segments in 8 months with zero rejections.

PRODUCTIVITY GAIN

Up to +20% faster production

RESOURCE EFFICIENCY

~30% reduction in surveying manpower

CAPEX SAVINGS

Reuse of existing casting yard (no additional investment required)