Alsína
FORMWORK SOLUTIONS

ENGINEERING

CORPORATE · TRANSPORTATION · WATER · ENGINEERING · MECANOCONCEPT

ISO 9001
BUREAU VERITAS
Certification
Encofrados J.Alsina, S.A.

ALSINA MISSION STATEMENT

"To offer Solutions for Concrete Structures that help our customers improve efficiency and safety in their projects, through a committed service and proximity in the global market by innovating and investing in our workers as a key component of the business."

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COMPREHENSIVE SERVICE

Experience in complex projects. Alsina has 65 years of experience in the industry, thousands of completed projects back us as one of the leading companies in the industry given our technology and management skills.

We are a fundamental part of the business and therefore understand the complexity of carrying out major projects and assume the responsibility of advising and assisting our clients so they can achieve their goals.

Our goal is to offer one of the most expert services in the market. Therefore all areas of Alsina are interconnected in order to offer the best solution in each case and earn our customers' trust.

Comprehensive project management. Alsina's sales team consists of professionals who use their experience and professional knowledge to offer cost-effective and decisive solutions.

We understand the complexity of projects standing at our customer's side so that we can listen, advise and monitor the evolution of the works until completed.

We are on the client's side listening to them, advising them and always offering the best alternative to address their concrete project "in situ." Trust Alsina as a strategic partner.

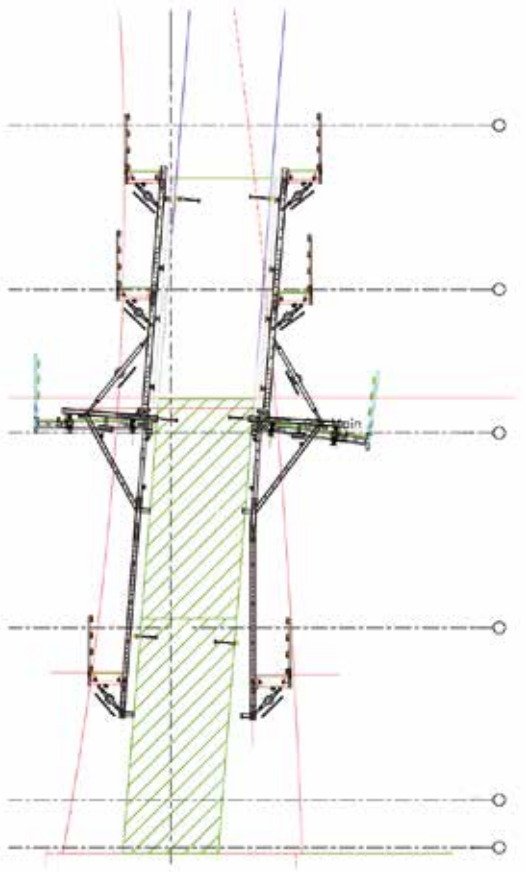
Global Logistics Service. The logistics service is key to ensuring that the work is carried out within the time frame specified by the customer.

To do this, Alsina has its own network with facilities that ensure the supply of equipment "just in time" to guarantee the formwork rental service.

All of our formwork complies with the same cycle worldwide: delivery on site, implementation of the concrete structure, management of returns, repair of equipment under the quality standards of ISO 9001:2008 and return to the rental warehouse ready for use in another project.


Alsina
CHEROKEE PUMPING of FLORIDA

MIAMI BALLPARK MARLINS STADIUM (USA)

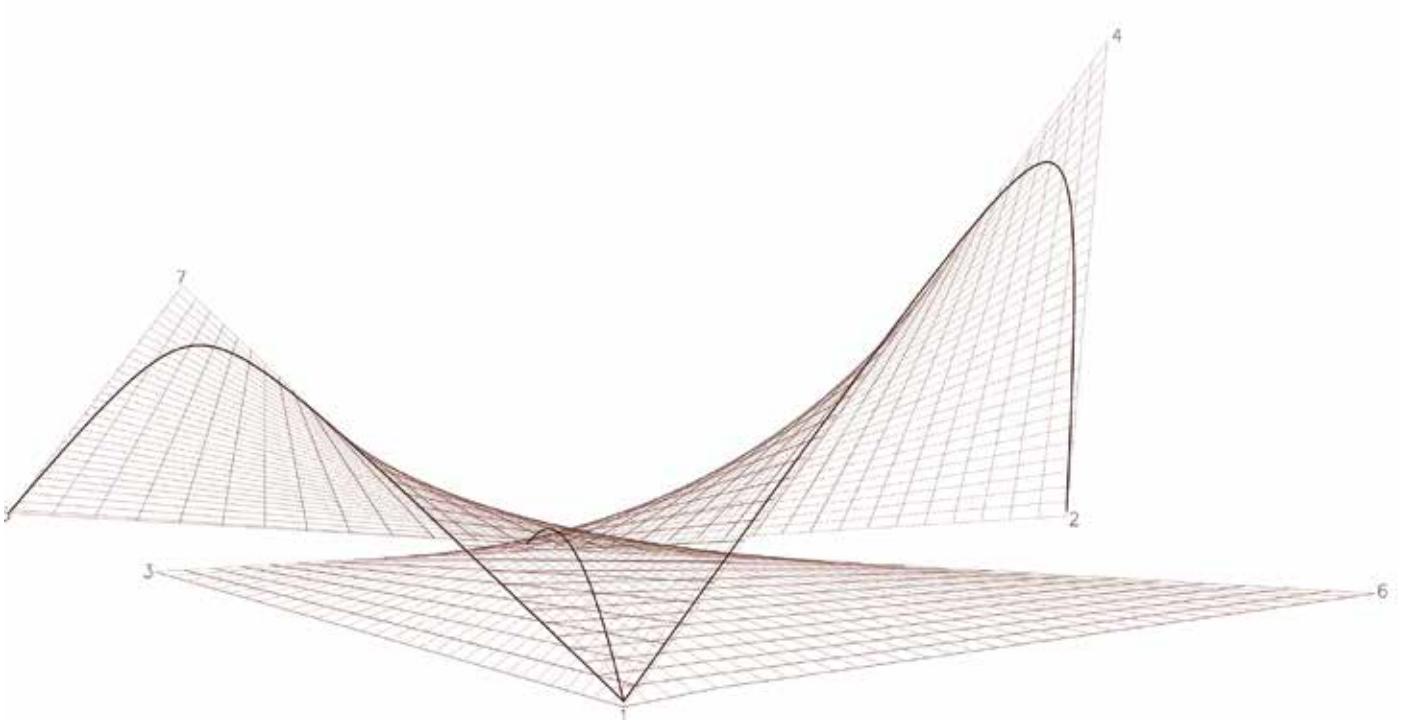


This project consists of 4 columns (the purpose of which is to support the weight of the retractable roof when it is open). The columns have a cross-shaped geometry at the base, and as they rise upward they divide into three separate arms. All sides are curved at heights, with sections that vary with the level, along both axes, and in each of the formwork applications. They have an exposed finish.

We used the one-sided climbing system to support the concrete loads on angled sides, and the Imperial Alisply wall system was installed to handle the reductions in cross-sections in the different formwork applications. One of the biggest challenges was laying out the climbing system in the sections where the main column split into three smaller columns, fitting the different climbing brackets and creating a perimeter working platform all at the same height.

SAILING CENTER IN CADIZ (SPAIN)

Project located in Cádiz with a spectacular geometry and high altitude. To execute this job, the system chosen was the multidirectional support structure for slab formwork. The Alsina's CL-40 Shoring system was used due its light weight, easy component assembly and bearing capacity of up to 40 kN per support, making it a very useful element for the support of slab formwork, wether by means of independent towers or fixed scaffolding.

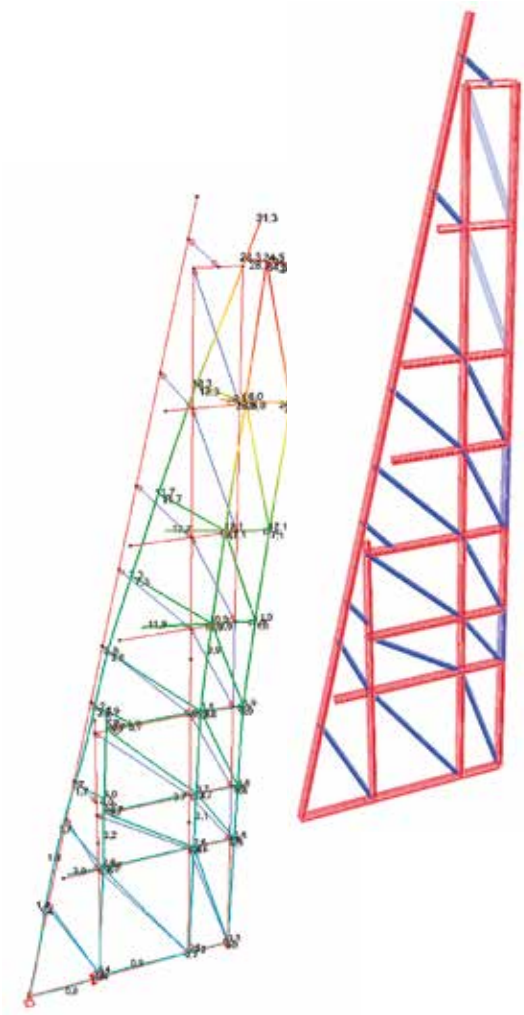


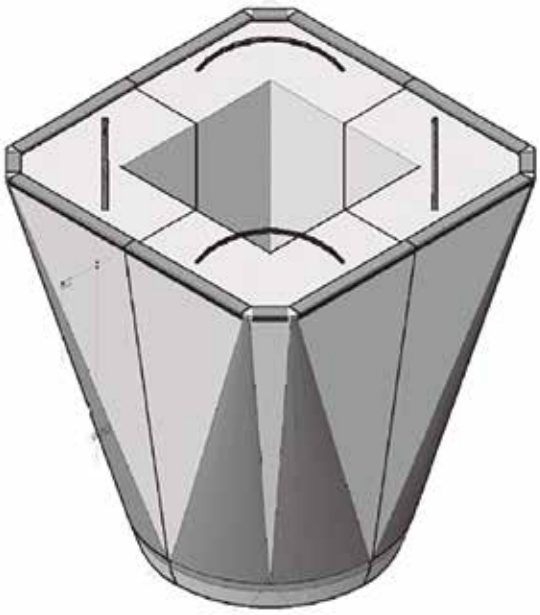
SANTA ANNA CHURCH (ITALY)

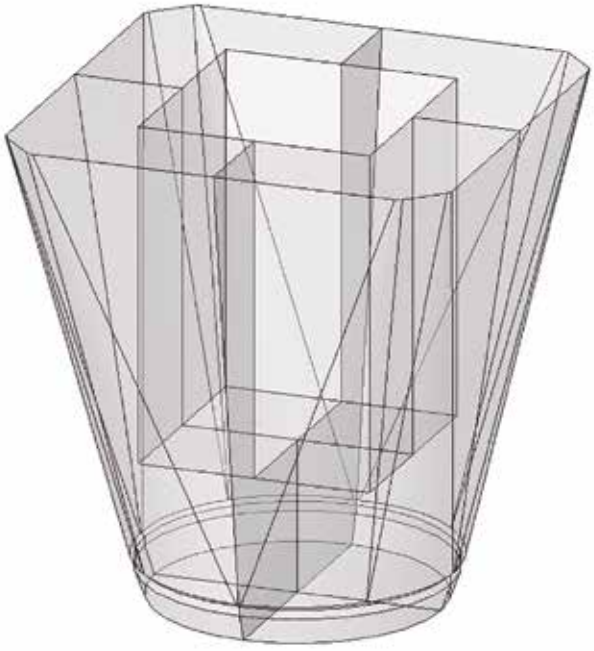
This project involves the construction of a 35 m tall circular bell tower, a two-story parish building, the church building consisting of a 15 m tall inclined wall and a 500 m^2 inclined slab of variable height up to 15 m.

The following were used: the Alisply Circular Radius System to build the bell tower, the Springform and Alumecano systems for the columns and slabs of the parish building, the Multiform System for building the inclined wall, and CL-40 scaffolding to build the church's slabs.

In addition, the use of a special part for the Multiform struts to connect the perpendicular Multiform beams with struts was studied. This part made it possible to join Multiform beams for the inclined-wall structure.







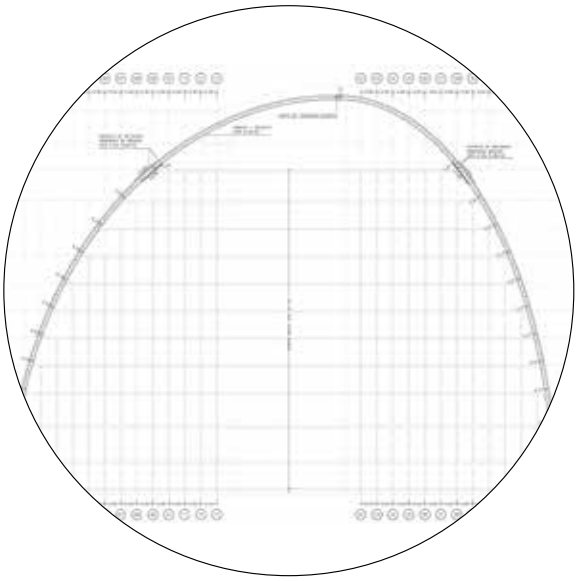
FLOUR WAREHOUSE IN MODENA (ITALY)

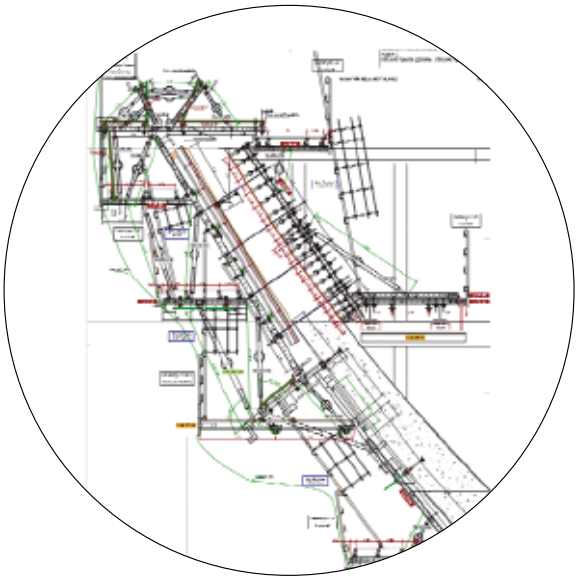
The warehouse is 31.45 meters tall and consists of two lower floors for unloading trucks and housing motors for handling the flour, above which 19 cells were built for storing the flour, up to the final height. The first level of the cells is made up of 19 holes shaped like a conical frustum with a square base: the difficulty of pouring these shapes was resolved by using Porex casting molds, which resulted in a very nice finish.

The cells were built using 3 m climbing systems, using Multiform climbing on the outside and interior climbing inside the cells. A variation on the interior climbing system allowed the slabs covering the cells to be poured.

BBVA BANK HEADQUARTERS (SPAIN)

This spectacular project has a unique geometry, for which it was necessary to design and calculate special formwork and find solutions to many challenges. This project's main requirement was formwork consisting of inclined radius walls in the shape of a kiwi slice. The inclined walls had different angle offsets from one formwork application to the next. The vertical height of the building that required formwork was 60 meters. To overcome this challenge, Alsina's one-sided climbing system was used, which is ideal for safely building vertical walls and single-sided inclined walls at heights. The versatility and safety offered by this system was greatly appreciated.





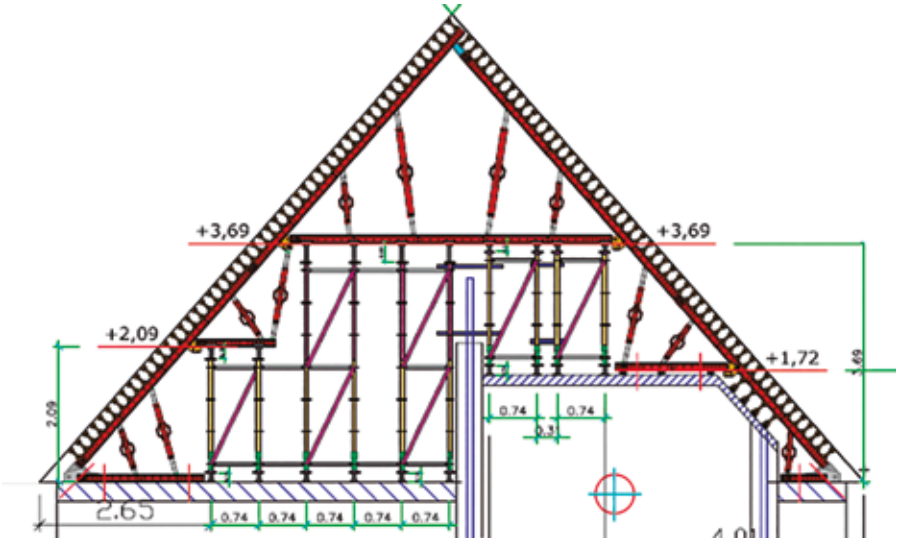

Genie BOOM

PEDESTRIAN BRIDGE (SPAIN)

This project involved strict requirements for the exposed finish of the concrete. The double curve shape of the slab also had to be maintained, in accordance with the project design. Various solutions were studied. The first was to create mechanized porex pieces, which yielded the double curve shape but were excessively expensive. The second was to build wooden molds that were less costly, but did not achieve the desired shape, since their sides are polygonal. Our solution struck a balance in terms of cost, and we guaranteed the shape required in the project design. The lower columns also had a peculiar pointed shape.

ELORRIO DIVERSION (SPAIN)

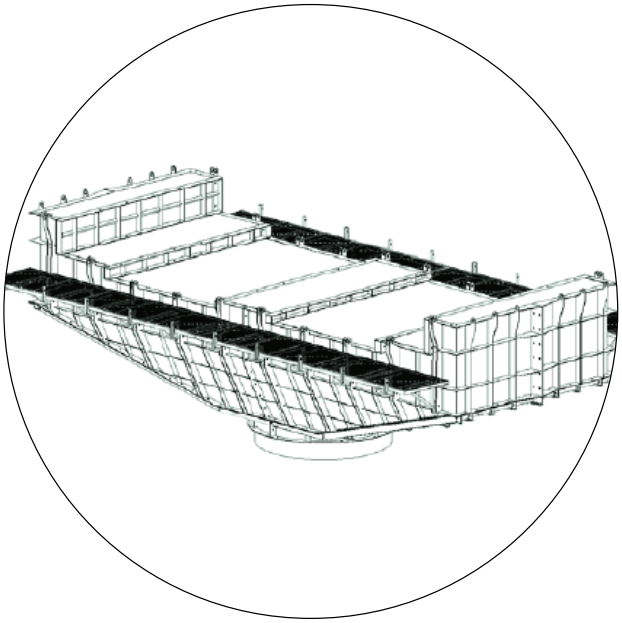
Alsina participated in building this bypass (connecting the AP8 highway to the BI-632) as a turnkey project. It was in charge of building and pouring the concrete for a large number of the concrete structures. The structures mainly consisted of very tall abutments, uniquely shaped piers and a bridge with an in situ variable section deck.



For the engineering, it was necessary to design and develop special pieces, lay out and adapt conventional scaffolding and formwork, design auxiliary means, manage the project and generally support activities, all within the deadlines set for the project.

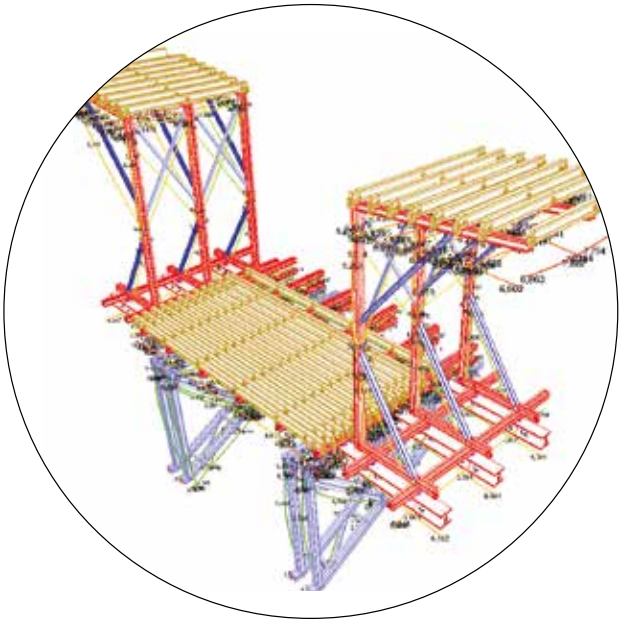
DHELI METRO (INDIA)

This project consists of the metro overpass in Delhi, India. To build this important project, we designed and calculated special metal formwork with a specific geometry allowing the chain of bridge piers to be built. The solution is made up of a total of 6 pieces (4 lateral molds and 2 bottom ones bolted to each other. The bolts also absorb lateral pressure. These molds will be supported by AR-80 scaffolding, on which the load of the concrete's weight will rest.



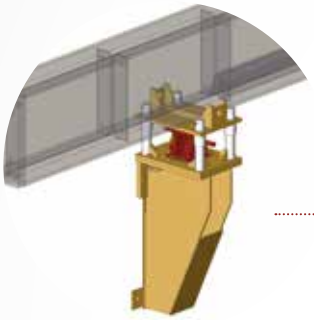
RUTA DEL SOL ROAD (COLOMBIA)

This emblematic work in Colombia involves one of the country's most important road corridors. To complete this project, we designed and calculated special supports and formwork for bridge segment 0. The supports were designed using two symmetrical sets of two A-frames anchored to the pier itself. The framework of the walls in the anchoring area had to be reinforced. The formwork was designed using a system of HEB400 beams and the Multiform system.



Comprehensive Sales, Technical and Logistics Service

Walls systems, Safe and Reliable



Own Software Systems for Study Each Project

Tunneling Systems and Solutions

Multiple Bridge Solutions

Multiple Piles Solutions

Shoring Solutions

Custom Solutions on demand

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