



THE NOTRE-DAME-D'AUFFAY COLLEGIATE CHURCH ENTERS THE FINAL PHASE OF ITS RENOVATION WITH THE RESTORATION OF ITS 72-METRE-HIGH SPIRE

After six years of works, the Notre-Dame-d'Auffay (76) collegiate church has entered its sixth and final renovation phase, with the removal and restoration of the spire. This crucial stage required the installation of 25 metres of freestanding scaffolding, which Tubesca- Comabi is responsible for supply, assembly and dismantling.

Located in Val-de-Scie, in the Seine-Maritime department (76), the Notre-Dame-d'Auffay collegiate church is a monument dating back to the 11th century. Extensive restoration work began on this historic monument in 2017. The restoration of the collegiate church was meticulously organised into six key phases, with one firm phase and five conditional phases. This year, the restoration work entered its final phase, considered crucial to the preservation of this heritage monument.

Tailor-made solutions to overcome technical challenges



Tubesca-Comabi, the French leading manufacturer and supplier of access and working at height solutions, is responsible for the supply, assembly and dismantling of the scaffolding throughout the worksite. This final stage, involving the complete renovation of the top of the spire, required the installation of 36 levels of scaffolding 72 metres high. For Tubesca-Comabi, the most complex technical challenge, in terms of the spire, was the installation of 25 metres of freestanding scaffolding to enable the craftsmen to work safely and efficiently.

With this major renovation project came a whole series of technical and logistical constraints. In order to restore the spire, special equipment had to be installed to ensure the safety of workers at a height of 72 metres.



The structure was conceived and designed to facilitate access for the various trades and consists of:

- M368 multidirectional external scaffolding, one metre wide
- Freestanding scaffolding at spire level, 25 metres high
- **Two indoor scaffolding structures**: in the bell room and on the spire, to reinforce the external scaffolding and simplify the work of the stonemasons.
- Protective netting around the bell tower with 53-metre supply systems
- **70-metre UNISTEP stairs** to facilitate access for the renovation teams.

Similarly, as the feet of the other scaffolding rest on the heights of the collegiate church, additional precautions had to be devised and established to prevent damage during the works.



The worksite in figures:

- 6 years or work in 6 phases
- 85 tonnes of equipment used
- 36 levels of scaffolding 72 metres high
- Freestanding scaffolding 25 metres high



Jean-Charles Durand, works engineer at Tubesca-Comabi

In addition to the preliminary technical constraints, did you have to deal with any other constraints on the worksite?

We had to overcome a number of technical difficulties, in particular to reduce the stresses on the roof supports. The steep slope meant that we had to reduce the mesh at the base of the scaffolding to make it easier for the installers to work and reduce the load on their feet. Under-roof shoring was also added to relieve the load on the framework. The other main difficulty was to make the scaffolding freestanding over the last 20 metres, as the spire had to be removed in order to be rebuilt. It was impossible to support the spire.

Is there anything you would like to highlight?

On this type of worksite, it's very difficult to get a good idea of the duration of the assembly time. There are a lot of hazards involved, not least the transport of the parts, which are reworked up to four times before being installed. This will lead us to think differently about our future large-scale worksites.

How would you describe this worksite?

It was a very rewarding worksite from both a technical and organisational point of view, and will enable me to approach our future worksites in a different way. On a more personal note, I consider it a real privilege to be able to explore the inside and the top of a spire! It's impossible to visit without scaffolding, not to mention the view from the top.

ABOUT TUBESCA-COMABI Confidence at height

TUBESCA-COMABI, the French leading manufacturer and supplier of access and working at height solutions for more than 60 years, offers both standard access solutions (ladders, steps, individual work platforms) and specific access solutions for worksites (scaffold towers and fixed scaffolding) and for industrial and aeronautical maintenance (maintenance docks). In 2016, TUBESCA-COMABI became part of the Frénéhard et Michaux group, whose ambition is to develop a comprehensive range of products and services around confidence at height across Europe. The company relies on a rich network of distributors and also offers a direct sales channel to professionals in the building and public work/structural building industry or to rental companies. 100% of its products and solutions are designed and manufactured in France in 2 industrial sites and certified by national and European bodies.

