

## **Christo and Jeanne-Claude „L’Arc de Triomphe, Wrapped“ backstage - engineering for a work of art**

Dipl.-Ing. Jörg Tritthardt

büro für leichtbau Tritthardt+Richter

**The full version of the film (1h:37) on the progress of the project between summer 2019 and dismantling in October 2021 will be presented during TENSINANTES2023.**

The progress of the project will be documented in various sections: start with mockup in Paris, Nantes with test of steel cable, wind tunnel test, sewing, mockup Berlin, red rope test, hot steel production for ballast, red rope production, Vault machine bench, test in Dunkerque, folding + rolling, steel production, installation in Paris, finished project „L’Arc de Triomphe Wrapped“ & disassembly.

The documentation shows that nothing is left to chance here. It shows the precision, with which a project of this dimension is planned and realized. Christo checks the visual appearance, the proportions of the rope diameter, the number of ropes, the course of the rope and the folds. It is shown how the enveloping geometry from Christo's drawings is adopted as the basis for the steel construction. Furthermore, insights into the static calculations of the textile and the ropes are given. It is shown how the parameters of the material properties are determined as a basis for the static calculation. It is shown how the planning is carried out on a 3D CAD model in interdisciplinary cooperation between those involved in the planning.

**Keywords:** work of art engineering, textile engineering, formfinding, membrane analysis, textile rope analysis, cutting pattern, structural textile design, detail design, site management, sewing process, testing lab for fabric



Day of unrolling outer façade ©Jörg Tritthardt  
L’Arc de Triomphe Wrapped / Christoandjeanneclaude.net



Early morning ©Jörg Tritthardt  
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