

Visionary stage design realised with 200 tonnes of PERI UP scaffolding

World Youth Day 2023, Lisbon, Portugal

World Youth Day (WYD) is an international event where young people from all over the world gather every two or three years to meet the Pope. Founded by Pope John Paul II, WYD was first held in Rome in 1986 and has since been held in numerous cities around the world. In 2023, the event was organised in Lisbon during the first week of August and attracted around 1.5 million participants.

In mid-April, the WYD 2023 Foundation turned to PERI for scaffolding and technical support for the temporary stage. This task presented a number of challenges in terms of logistics, calculation and manpower. Thanks to the flexibility of the PERI UP Scaffolding Kit, clear visualisations based on 3D models and the promise to deliver 200 tonnes of material on time, PERI was able to win the contract.

Challenges at the assembly of the rear towers

The stage was in the Parque Eduardo VII and consisted of several sections: the stage area, the main tribune area, and towering rear structures.

A particular challenge was the construction of the impressive rear towers, which were the size of an Olympic swimming pool: 26 metres high, 40 metres wide and up to 12.5 metres deep, including 115 tonnes of counterweights. In addition, the Monument to the 25th April Revolution was inside the scaffolding. This had to be protected, so the usual bracing could not be used. Another challenge was to design a stage that could withstand the strong winds that were constantly blowing at the site.

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Engineering excellence with PERI scaffolding solutions and 3D planning

The main challenge for the engineering team was to design a tall and slender structure. To meet the client's requirements, the elements of the PERI UP Scaffolding Kit were used and supplemented with 4,000 metres of VT 20 Alpha formwork beams and 2,000 square metres of 3-layer plywood panels, which were used to form various platforms. The structure was anchored to the counterweights with SRU steel walers and tie rods.

3D design played an important role in this project. It provided a visual representation of all potential obstacles and helped both the design and installation teams to identify and overcome problems, adjustments, and modifications. In addition, it also assisted in the creation of several walkways and access points for the artists and the participants.

Thanks to PERI UP, the client's design ideas could be realised while providing the necessary safety measures.

PERI's expertise as a real customer benefit

PERI's expertise enabled the timely delivery of materials, an efficient assembly process and thus the achievement of the objectives within the defined time frame. Open communication and quick solutions to unplanned challenges also contributed to the timely erection of the stage for the World Youth Day so the event could take place safely and smoothly.



Photo 1

The 26 m high rear tower was a complex structure as it could not be tied and anchored in the usual way. There was also a historic statue in the centre of the scaffolding that needed to be protected.

(Photo: PERI SE)

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Photo 2

In addition to the elements of the PERI UP Scaffolding Kit, VT girders and 3-ply plywood were used to form various platforms, while SRU steel walers and tie rods were applied for anchoring the scaffolding to the counterweights.

(Photo: PERI SE)



Photo 3

Multiple access points were created to support the safe execution of the choreography planned for the event. With the PERI UP Scaffolding System, these internal passages could be realised without problems.

(Photo: PERI SE)



Photo 4

The team had to bear in mind the considerable height and wind exposure of the area, which necessitated the securing of the perimeter and the addition of numerous counterweights.

(Photo: PERI SE)



Photo 5

The event took place in Lisbon's Parque Eduardo VII during the first week of August 2023 and welcomed around 1.5 million people.

(Photo: PERI SE)

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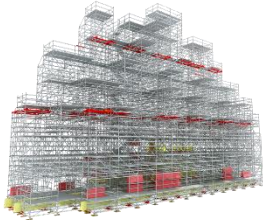


Photo 6

The 3D model provided a visual representation of any potential obstructions, providing valuable insight for the design and installation teams.
(3D model: PERI Iberia)



Photo 7

A mixture of ballast and flexible modular scaffold was built around the historic monument. 3D visualisation of the complex structure helped to protect the statue.
(3D model: PERI Iberia)

Contractor

WYD 2023 Foundation | Lisbon, Portugal

Field Service

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